

ARTICLES

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Applying *Jus In Bello* Proportionality to Drone Warfare

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Chief of Staff MacInerney: "It's immediate, it's decisive, it's low risk, and it's a proportional response."

President Shepherd: "Someday somebody's going to have to explain to me the virtue of a proportional response."

—Fictional American President Andrew Shepherd
From *The American President*

ABSTRACT

This Article applies the international humanitarian law (IHL) principle of proportionality to the use of unmanned aerial vehicles (UAVs), commonly referred to as drones,¹ by the United States military forces (U.S. Military) and the United States Central Intelligence Agency (CIA) in its armed conflicts in Iraq and Afghanistan and the "war on terror" in places such as Pakistan, Yemen, Somalia, and Mali.² Iraq and Afghanistan began as more conventional armed conflicts that yielded to occupations with a continuing conflict against irregular insurgents. Pakistan, Yemen, Somalia, and Mali fall into the so-called "targeted killings" genre, defined as the "premeditated and deliberate use of lethal force, by States or their agents acting under colour of law, or by an organized armed group in armed conflict, against a specific individual who is not in the physical custody of the perpetrator."³

¹ There are hundreds of kinds of unmanned aerial vehicles. This Article focuses on two that have the capability to deploy lethal force—Predator and Reapers drones—and have been used extensively in this capacity. This Article will use the terms UAVs and drones interchangeably to refer exclusively to Predator and Reaper drones.

² Jonathan Masters, *Targeted Killings*, COUNCIL ON FOREIGN REL. (May 23, 2013), <http://www.cfr.org/counterterrorism/targeted-killings/p9627>.

³ Philip Alston, *UN: Report of the Special Rapporteur on Extrajudicial Summary, or Arbitrary Executions*, COUNCIL ON FOREIGN REL. (May 28, 2010), <http://www.cfr.org/counterterrorism/un-report-special-rapporteur-extrajudicial-summary-arbitrary-executions/p22297>.

Both of these types of situations are emblematic of what we can expect future military engagements to resemble: asymmetrical conflicts involving the use of highly sophisticated UAVs deployed by professional armed forces, remotely piloted from outside the theatre of conflict, attacking irregular militants who operate in or near civilian populations. For the purposes of this Article, collectively this tactic will be termed “UAV warfare.”

In armed conflicts, the IHL proportionality rule (IHL Proportionality) prohibits an attack when the anticipated military advantage of the attack is excessive compared to the expected civilian harm. UAV warfare to date has resulted in a significant number of civilian casualties, leading some to conclude that the tactic is inherently disproportionate. These conclusions are often problematic. First, they commonly confuse or conflate IHL proportionality with similar concepts found in international *jus ad bellum* and human rights law or a colloquial sense of the term. Second, they nearly always issue summary conclusions of its effect with little explanation about the actual operation of the rule.

In this Article, I examine IHL proportionality in detail and as applied in the context of the unique aspects of UAV warfare. Existing cases and commentary regularly assume that proportionality is a one-size-fits-all rule, whether the impugned attacker is a four-star general or a lowly platoon commander. This Article asserts that proportionality requires different applications in the cases of high-ranking and low-ranking belligerents. The Article also emphasizes how courts and commentators frequently fall into the trap of retrospectively applying casualty statistics to assess the proportionality of an attack, rather than using those statistics to inform the reasonableness of the attacker’s *a priori* assessment.

INTRODUCTION

On August 5, 2009, the CIA, in conjunction with the U.S. Military, attacked and killed the leader of Pakistan’s Taliban movement Baitullah Mehsud in the Pakistani village of Zanghara.⁴ The

⁴ Pir Zubair Shah, Sabrina Tavernise & Mark Mazzetti, *Taliban Leader in Pakistan Is Reportedly Killed*, N.Y. TIMES (Aug. 8, 2009), http://www.nytimes.com/2009/08/08/world/asia/08pstan.html?_r=1&ref=baitullah_mehsud (Mehsud and his network were suspected to have carried out dozens of suicide attacks and the 2007 assassination of former Prime Minister Benazir Bhutto); Ishtiaq Mahsud & Kay Johnson, *Baitullah Mehsud Killed in US Strike, Pakistani Taliban Admit*, THE WORLD POST (Sept. 25, 2009, 5:12 AM EDT), http://www.huffingtonpost.com/2009/08/25/baitullah-mehsud-killed-i_n_268278.html.

methodology of the Mehsud strike is interesting because, unlike the use of UAVs in Pakistan generally, a surprising level of detail is publicly available. The strike began as a joint effort between the governments of Pakistan and the United States, who had met one month earlier and agreed to target Mehsud and his network.⁵ The agreement quickly proved fruitful as Pakistani intelligence operatives delivered accurate leads using informants inside the Mehsud's network, communications intercepts, and satellite imagery shared by the American and Pakistani intelligence services.⁶ As the trail grew hotter, the CIA escalated the aerial reconnaissance of Mehsud. Reports indicate that the United States allocated nine drones to gather intelligence on him prior to the attack.⁷ On August 5 or 6, a Predator drone conducting surveillance identified Mehsud on the rooftop of his father-in-law's home while he was being attended to by one of his wives, receiving either an intravenous drip⁸ or a leg massage.⁹ The CIA knew that Mehsud had diabetes that was being treated by his wife's uncle in Zanghara.¹⁰ The CIA also knew that Mehsud's diabetes produced pain in his legs and that he often had leg massages to relieve the pain.¹¹ According to a senior security official, "he was clearly visible with his wife."¹² Pakistan's Interior Minister, A. Rehman, who observed the video, later stated, "it was a perfect picture."¹³

The United States struck quickly, using a UAV to deploy two hellfire missiles that killed Mehsud and eleven other people in the

⁵ *Id.*

⁶ *Id.*

⁷ *Mehsud killed while getting 'leg massage': report*, AFP (Nov. 8, 2009), http://www.google.com/hostednews/afp/article/ALeqM5i4Eq_E-YhxSAgx8uKC1d9lezD2-A.

⁸ Shah et al., *supra* note 4, at 3.

⁹ *Mehsud killed while getting 'leg massage': report*, *supra* note 7, at 3.

¹⁰ Shah et al., *supra* note 4. See Mary Ellen O'Connell, *Unlawful Killing with Combat Drones, A Case Study of Pakistan, 2004-2009*, 11 (Notre Dame L. Sch. Legal Studies Research Paper No. 09-43, 2010) (There is some dispute about exactly who was on the roof with Mehsud at the moment of the attack. O'Connell indicates that Mehsud's wife's uncle may have been on the roof treating Mehsud at the time of the attack along with Mehsud's wife, although this assertion is not sourced.).

¹¹ *Pakistan Government Challenges Taliban to Present Proof Its Warlord is Still Alive*, TAIPEI TIMES (Aug. 12, 2009), <http://www.taipetimes.com/News/front/archives/2009/08/12/2003450976>.

¹² Shah et al., *supra* note 4, at 3.

¹³ Jane Mayer, *The Predator War: What are the risks of the C.I.A.'s covert drone program?*, THE NEW YORKER (Oct. 26, 2009), http://www.newyorker.com/reporting/2009/10/26/091026fa_fact_mayer.

home, including Mr. Mehsud's wife, his wife's parents, one identified commander, and seven bodyguards.¹⁴

In an armed conflict—which does not exist between Pakistan and the United States in the conventional sense—Mehsud, the commander, and his bodyguards would be arguably legitimate military targets. The three other civilians would likely be considered incidental civilian casualties. This view results in a nine-to-three belligerent-to-civilian ratio.

Notre Dame Professor Mary Ellen O'Connell, a noted expert on the use of force, came to a different conclusion about the Mehsud attack. She wrote that, "Presumably only Mehsud was an intended target. The strike killed twelve-for-one intended target"¹⁵

A third way to view the attack is to look at the totality of the Mehsud mission. Jane Mayer, in *The New Yorker*, wrote that the August 6 strike was the last of sixteen UAV attacks that had targeted Mehsud, the previous fifteen being unsuccessful.¹⁶ She reported that the earlier, failed attacks were believed to have killed between 207 and 321 civilians, depending on the veracity assigned to reports of the attacks.¹⁷

The Mehsud example illustrates the difficulty in understanding and applying IHL Proportionality to UAV warfare. Defining the scope of the attack is one quandary. Defining who the combatants are is a second. A third quandary is whether IHL Proportionality applies at all. IHL is a legal regime that applies only in cases of "armed conflicts." IHL differentiates armed conflicts from lesser forms of hostilities, such as riots and disturbances, by looking at the organization of the opposing forces and the intensity of the fighting. UAV Warfare is problematic on both counts. It involves ideological combatants in decentralized, fluid groups such as Al-Qaeda. And the fighting typically consists of sporadic acts of terror, as opposed to military armed force. UAV Warfare does not easily fit into the IHL box.

¹⁴ Shah et al., *supra* note 4, at 3.

¹⁵ O'Connell, *supra* note 10, at 11 (Based on her 12-1 assessment, O'Connell concluded that, "In the conditions of the Pakistan border region, using drones to selectively target individuals is impossible.").

¹⁶ Mayer, *supra* note 13 (while the previous attacks were unsuccessful in killing Baitullah Mehsud, other militants were killed in the attacks on his deputy Hakimullah Mehsud).

¹⁷ *Id.*

Proportionality is one of the fundamental principles of IHL, along with humanity, distinction, and necessity.¹⁸ It limits the amount of incidental civilian harm that can be incurred in the pursuit of legitimate military objectives. Despite its importance, proportionality has always been one of the most difficult in terms of practical application. The International Criminal Tribunal for the Former Yugoslavia (ICTY) Prosecutor was called upon to form a committee to investigate whether North Atlantic Treaty Organization (NATO) forces had violated IHL Proportionality, along with other IHL crimes, in its campaign against Serbia in 1999. On the issue of IHL Proportionality, the committee specifically concluded that, “[i]t is much easier to formulate the principle of proportionality in general terms than it is to apply it to a particular set of circumstances.”¹⁹

Notwithstanding that reality, critics and pundits liberally invoke IHL Proportionality when critiquing military attacks and campaigns.²⁰ Australian counter-terrorism expert David Kilcullen wrote in *The New York Times* in March 2009, relying on statistics provided by Pakistani sources, that the United States was killing fifty unintended targets for each intended target.²¹ He translated this into what he termed a United States “hit rate” of two percent. Daniel Byman of the Brookings Institute reported that, “for every militant killed, 10 or so civilians also died.”²² This equates to a 10% success or “hit” rate to borrow

¹⁸ JOINT CHIEFS OF STAFF, JOINT DOCTRINE FOR TARGETING, J.P. DOC. NO. 3–60, at A2-A3 (2002), available at http://www.dtic.mil/doctrine/jel/new_pubs/jp3_60606013.pdf.

¹⁹ Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia, [hereinafter Final Report to Review the NATO Bombing Campaign], 39 I.L.M. 1257 (Int’l Crim. Trib. For the Former Yugoslavia June 13, 2000).

²⁰ See Aaleem Gardezi, *Drone Strikes: A Violation of Law*, THE NATION, (Apr. 3, 2010) at 6, available at <http://www.nation.com.pk/E-Paper/laure/2010-04-13/page-6> (“Further, Article 51(5) talks about the principle of discrimination and regards an attack to be indiscriminate when bombarded by any means or methods which may lead to an incidental loss of civilian life.”).

²¹ David Kilcullen & Andrew McDonald Exum, *Death From Above, Outrage Down Below*, N.Y. TIMES (May 16, 2009), http://www.nytimes.com/2009/05/17/opinion/17exum.html?_r=1&scp=1&sq=death%20from%20above,%20outrage%20from%20below&st=cse (note that Kilcullen also stated that “American officials vehemently dispute these figures, and it is likely that more militants and fewer civilians have been killed than is reported by the press in Pakistan”).

²² Daniel L. Byman, *Do Targeted Killings Work?*, BROOKINGS (July 14, 2009), <http://www.brookings.edu/research/opinions/2009/07/14-targeted-killings-byman>. (Byman notes that “[c]ritics correctly find many problems with this program, most of all the number of civilian casualties the strikes have incurred. Sourcing on civilian deaths is weak and the numbers are often exaggerated, but more than 600 civilians are likely to have died from the attacks.”).

Kilcullen's terminology. Professor O'Connell concluded that Kilcullen's figures of fifty civilians killed for every single suspected combatant killed is a "textbook example of a violation of the proportionality principle."²³

The data is a matter of contention. Some sources suggest the UAV strikes are more successful in limiting civilian casualties. The New American Foundation conducted its own study and reported that the United States was killing far fewer civilians, achieving a hit rate of 66%,²⁴ and close to 75% under Obama.²⁵ A reporter at The Real News²⁶ interviewed Pakistani students at Quaid-i-Azam University, a conservative school located on the outskirts of Islamabad that attracts students from all over the country, on the subject of the UAV attacks.²⁷ A Pakistani university student, Adnan Afridi, who hails from the Federally Administered Tribal Areas (FATA) in Pakistan where many of the UAV strikes occur, expressed his support of U.S. strikes. "Basically," he states, "I'm in favor of the drone

²³ O'Connell, *supra* note 10, at 24.

²⁴ Peter Bergen & Katherine Tiedemann, *Revenge of the Drones*, NEW AMERICA FOUNDATION (Oct. 19, 2009), http://www.newamerica.net/publications/policy/revenge_of_the_drones (Bergen and Tiedemann indicate that "Since 2006, our analysis indicates, 82 U.S. UAV attacks in Pakistan have killed between 750 and 1,000 people. Among them were about 20 leaders of al Qaeda, the Taliban, and allied groups, all of whom have been killed since January 2008. (A list of their names, as well as links to stories about the UAV strikes that targeted them, can be found in Appendix 1.)" Under Obama, the authors conclude that "the strikes have taken out at most a half-dozen militant leaders while also killing as many as 530 others. Of those, around 250 to 400 are reported to have been lower-level militants, about three quarters, and about a quarter appear to have been civilians. The strikes appear to have killed a slightly lower percentage of civilians in the past nine months than during the earlier years of the American drone campaign in Pakistan.").

²⁵ *Talk of the Nation: The Legal and Moral Issues of Drone Use*, NPR (Mar. 30, 2010), <http://www.npr.org/templates/story/story.php?storyId=125355144> ("While this analysis sheds a more favorable light on the US campaign, it still means that the attacks result in civilians end up as 25% of the casualties or more."); *see also infra* note 27.

²⁶ THE REAL NEWS (July 15, 2010), <http://therealnews.com/t2/about-us> (accessed on July 15, 2010). (The Real News is an Internet based news organization that purports to conduct independent journalism. Its website offers the following description of its work: "The Real News Network is a television news and documentary network focused on providing independent and uncompromising journalism. Our staff, in collaboration with courageous journalists around the globe, will investigate report and debate stories on the critical issues of our times. We are viewer supported and do not accept advertising, government or corporate funding.").

²⁷ Sean Nevins, *Drones Strikes Stir Controversy in Pakistan*, THE REAL NEWS (July 14, 2010), http://www.therealnews.com/t2/index.php?option=com_content&task=view&id=31&Itemid=74&jumival=5383&updaterx=2010-07-14+03%3A08%3A20.

attacks because it (sic) just only killed the extremists and terrorists.”²⁸ Another unidentified student from Balochistan offers “If you talk to the tribal people, they will not oppose the drone attacks, because they are not creating a collateral damage; they are just hitting their targets.”²⁹

The personal experience of *New York Times* reporter David Rohde supports these Pakistani accounts. He was captured by the Taliban while investigating a story in Afghanistan. He later recounted the story of his captivity in a five-part series in the *Times*.³⁰ The Taliban relocated him to a secret location near Miram Shah, the capital and largest town in North Waziristan in Pakistan.³¹ Rohde told of powerful missiles fired by an American UAV that “obliterated their target a few hundred yards from our house in a remote village in Pakistan’s tribal areas.”³² From his vantage point:

[He] heard men shouting as they collected their dead. If many people had been killed, particularly women and children, we were sure to die. . . . After about 15 minutes, the guards returned to the car and led me back to the house. The missiles had struck two cars, killing a total of seven Arab militants and local Taliban fighters. I felt a small measure of relief that no civilians had been killed.³³

No matter what ultimately is proven to be the real figure for civilian casualty rates, it is beyond dispute that civilians are killed as the expected collateral effect of UAV Warfare. The question posed by IHL Proportionality is: what rate of civilian casualty does the principle of proportionality accept? This Article examines the body of treaties and international tribunal statutes, commentaries, and jurisprudences pertaining to IHL Proportionality for clues as to how it will apply to UAV warfare.

The Article makes two rather large assumptions. The first is that an armed conflict can and does exist between the United States and a global non-state actor such as Al-Qaeda. The second is that IHL proportionality pertains to United States’ attacks against enemy combatants in safe havens or friendly states such as Pakistan and ungoverned states such as Somalia. Commentators differ in their

²⁸ *Id.*

²⁹ *Id.*

³⁰ David Rohde, *7 Months, 10 Days in Captivity*, N.Y. TIMES (Oct. 17, 2009), <http://www.nytimes.com/2009/10/18/world/asia/18hostage.html>.

³¹ *Id.*

³² David Rohde, *A Drone Strike and Dwindling Hope*, N.Y. TIMES (Oct. 20, 2009), <http://www.nytimes.com/2009/10/21/world/asia/21hostage.html>.

³³ *Id.*

views about what legal regime applies to the friendly state scenario, ranging from *jus ad bellum* (the international law on the use of force as spelled out in the United Nations Charter and customary law), human rights law, U.S. constitutional law, and of course IHL. This article sidesteps these important and difficult issues. In order to focus squarely on IHL Proportionality, this Article assumes that an armed conflict exists, IHL is applicable to UAV warfare in the traditional sense of armed conflict (two organized militaries pitted against each other), and in the case of an organized military using UAVs to target irregular militants in “friendly” or lawless states.

I

BACKGROUND: THE CHARACTERISTICS OF MODERN UAV WARFARE

A “revolution in military affairs,” or RMA, is defined as a “major change in the nature of warfare brought about the innovative application of new technologies which, combined with changes in military doctrine and operational and organizational concepts, fundamentally alters the conduct of military operations.”³⁴ UAVs are almost certainly an RMA.³⁵ UAVs have seen an exponential growth in the United States military and they are “bringing about the most profound transformation of warfare since the advent of the atom bomb.”³⁶ When the United States invaded Iraq in 2003 in “Operation Iraqi Freedom,” the United States had few operational drones in its arsenal.³⁷ Today, it has 7,000.³⁸

A “UAV” is a pilotless aircraft that can be controlled from thousands of miles away to conduct reconnaissance or to deploy lethal

³⁴ JEFFREY MCKITRICK ET AL., *The Revolution in Military Affairs*, in *BATTLEFIELD OF THE FUTURE: 21ST CENTURY WARFARE ISSUES* 65 (Barry R. Schneider & Lawrence E. Grinter eds., rev. ed. 1998).

³⁵ PETER SINGER, *WIRED FOR WAR: THE ROBOTICS REVOLUTION AND CONFLICT IN THE 21ST CENTURY* 57 (2009).

³⁶ Sherwood Ross, *Pentagon Robot Culture Ominous Development*, OEN-OP ED NEWS.COM (July 18, 2010), <http://www.opednews.com/articles/Pentagon-Robot-Culture-Omi-by-Sherwood-Ross-100718-172.html>.

³⁷ Alan Brown, *The Drone Warriors*, MECHANICAL ENGINEERING (Jan. 2010), <http://www.highbeam.com/doc/1G1-219306853.html>; Johann Hari, *The Age of the Killer Robot is no Longer a Sci-Fi Fantasy*, INDEP. (U.K.) (Jan. 22, 2010), <http://www.independent.co.uk/voices/commentators/johann-hari/johann-hari-the-age-of-the-killer-robot-is-no-longer-a-sci-fi-fantasy-1875220.html>.

³⁸ Elisabeth Bumiller & Thom Shanker, *War Evolves with Drones, Some Tiny as Bugs*, N.Y. TIMES (June 19, 2011), http://www.nytimes.com/2011/06/20/world/20drones.html?pagewanted=all&_r=0.

force remotely. The approach has several benefits. First, it eliminates the inherent limitations of a human in the cockpit. UAVs have virtually no gravitational or “G” force limits, whereas humans can endure a maximum of eight or nine G forces.³⁹ Pilots can only fly several hours before fatigue becomes a factor, whereas UAVs can fly for long periods of time, some more than twenty-four hours.⁴⁰ Humans in combat are subject to raw emotions such as fear, rage, and revenge that affect decision making, while UAVs have no emotions. And UAVs remove pilots from harm’s way, a very appealing attribute for a United States Congress that is decreasingly willing to tolerate American casualties.⁴¹

While the last ten years have seen an exponential rise in the use of drones, the military has been experimenting with UAVs throughout the twentieth century in order to minimize casualties. During World War I, the United States developed a prototype for an aerial torpedo called the “Kettering Bug” that could be preprogrammed to hit targets as far as 75 miles away.⁴² By World War II, the Air Force had a secret Air Force program called “Operation Aphrodite” to develop remotely-controllable bombers.⁴³ During The Vietnam War, the United States flew thousands of missions with reconnaissance UAVs called the “Ryan Fire Fly” and “Lighting Bug.”⁴⁴ In the first Gulf War, the United States purchased Israeli reconnaissance drones and deployed them successfully in 522 sorties.⁴⁵ According to a 1991 Department of the Navy report, “At least one UAV was airborne at all times during Desert Storm.”⁴⁶

The first Gulf War established that UAVs could be reliable and effective as an intelligence tool. However, it wasn’t until ten years later that the United States began to deploy weaponized drones. In

³⁹ Peter Tyson, *All About G Forces*, NOVA (Nov. 1, 2007), <http://www.pbs.org/wgbh/nova/space/gravity-forces.html>.

⁴⁰ *Precisely Wrong: Gaza Civilians Killed by Israeli Drone-Launched Missiles*, Human Rights Watch 10 (June 30, 2009), http://www.hrw.org/sites/default/files/reports/iopt0609web_0.pdf.

⁴¹ SINGER, *supra* note 35, at 57.

⁴² John DeGaspari, *Look Ma, No Pilot!*, MECHANICAL ENGINEERING (Nov. 1, 2003), <http://www.memagazine.org/backissues/membersonly/nov03/features/lookma/lookma.html>.

⁴³ SINGER, *supra* note 35, at 48.

⁴⁴ WILLIAM WAGNER, *LIGHTNING BUGS AND OTHER RECONNAISSANCE DRONES* (1982).

⁴⁵ Singer, *supra* note 35, at 57.

⁴⁶ *Frontline: The Gulf War, Weapons: Drones (RPVs)* (PBS television broadcast 1995), <http://www.pbs.org/wgbh/pages/frontline/gulf/weapons/drones.html>.

2001, the Air Force deployed drones armed with missiles in support of the invasion of Afghanistan.⁴⁷ In 2002, the CIA carried out the first lethal UAV attack in Yemen (a country with which we were not at war) with a missile fired from a UAV.⁴⁸ By 2010, UAVs were ubiquitous in the Afghanistan/Iraq war and used frequently by the CIA against targets in Pakistan. In 2009, the United States Air Force conducted over 200 missile UAV strikes.⁴⁹ By early January 2010, the Air Force was deploying twenty drones over Afghanistan each day, twice as many as in the previous year.⁵⁰ The CIA authorized 50 UAV strikes in Pakistan in 2009, 109 in 2010, 73 in 2011, and 51 in 2012.⁵¹

It is important to note that there are two U.S. UAV programs.⁵² One is run by the U.S. Military and the CIA runs the other. The military program is public and there is much written about it. Much less is known about the CIA's UAV operation,⁵³ but recent reports have indicated that the Obama administration is curtailing the CIA program in favor of the Department of the Defense.⁵⁴

There are three defining features of UAVs that feature prominently in IHL Proportionality discussions. The first is the fact that UAVs are piloted remotely from military bases sometimes located thousands of miles away from the active theatre of conflict.⁵⁵ From the earliest days, armed forces have sought ways to distance the attacker from the target, in order to remove the attacker from harm's way. The UAV is the latest innovation along these lines, but represents a monumental advance that permits an armed force to remotely operate UAVs from anywhere in the world.

⁴⁷ O'Connell, *supra* at note 10, at 1.

⁴⁸ CIA 'Killed al-Qaeda Suspects' in Yemen, BBC (Nov. 5, 2002), <http://news.bbc.co.uk/2/hi/2402479.stm>.

⁴⁹ Christopher Drew, *Drones Are Playing a Growing Role in Afghanistan*, N.Y. TIMES (Feb. 19, 2010), <http://www.nytimes.com/2010/02/20/world/asia/20drones.html>.

⁵⁰ *Id.*

⁵¹ Dr. Zeeshan-ul-Hassan Usmani, PAKISTAN BODY COUNT, <http://pakistanbodycount.org/analytics>.

⁵² Mayer, *supra* note 13, at 3.

⁵³ *Id.*

⁵⁴ Micah Zenko, *Transferring CIA Drone Strikes to the Pentagon*, COUNCIL ON FOREIGN RELATIONS (Apr. 2003), <http://www.cfr.org/drones/transferring-cia-drone-strikes-pentagon/p30434>.

⁵⁵ Rob Blackhurst, *The Air Force Men Who Fly Drones in Afghanistan by Remote Control*, THE TELEGRAPH (Sept. 24, 2012), <http://www.telegraph.co.uk/news/uknews/defence/9552547/The-air-force-men-who-fly-drones-in-Afghanistan-by-remote-control.html>; see also Mayer, *supra* note 14.

The second is that different military personnel in various locations simultaneously monitor video feeds and other data produced by the drones. A typical scenario might have UAV pilots and bombardiers in Las Vegas; with UAV ground crews in Iraq; intelligence analysts in Garmin, Germany; strategic command in Tampa, Florida; and CIA operatives in Virginia—all watching the same video and other surveillance data, and conferring about it in a secure internet chat room.⁵⁶

The third defining feature is the ability of a UAV to conduct surveillance for long periods of time. This ability to loiter or dwell over an area is called “persistent stare” and it is one of the great advantages of UAV warfare.⁵⁷ One UAV pilot described how his unit could monitor a section of a city for a week, identify militants, then use UAVs to track them to their quarters, and develop a full intelligence profile.⁵⁸ Because no soldier is at risk in the field and subject to fatigue and hunger, the pilot can take her time in accumulating intelligence. UAVs are giving military forces an ability to be patient that is unprecedented. Military patience even has its own designated military unit. The United States has an operation called ODIN which stands for “Observe, Detect, Identify, and Neutralize.” It is a squad specializing in and perfecting “persistent stare” tactics. There are over 400 ODIN personnel that support ground forces in Iraq and Afghanistan.⁵⁹ One of its primary functions is to provide twenty-four hour, seven day-a-week surveillance and it has the ability to use the data to distinguish insurgents from civilians.

II

PROPORTIONALITY: PRINCIPLE AND LAW

IHL is a body of treaty and custom-based rules that regulates the conduct of armed conflict. Along with humanity, distinction, and necessity, proportionality is a cornerstone of IHL. The principle is designed to protect civilians in armed conflicts and it underpins provisions in several treaties and statutes.

⁵⁶ See Mark Bowden, *The Killing Machines*, THE ATLANTIC (Aug. 14, 2013), <http://www.theatlantic.com/magazine/archive/2013/09/the-killing-machines-how-to-think-about-drones/309434>.

⁵⁷ SINGER, *supra* note 35, at 22; Michael Lewis, *Drones and the Boundaries of the Battlefield*, 47 TEX. INT’L L.J. 293, 296–97 (2011).

⁵⁸ SINGER, *supra* note 35, at 22.

⁵⁹ See Military, *Task Force Observe, Detect, Identify, and Neutralize (Task Force ODIN)*, GLOBALSECURITY.ORG, (last visited Mar. 18, 2013), www.globalsecurity.org/military/agency/army/tf-odin.htm.

The Oxford English Dictionary defines “proportional” as an adjective describing something as “corresponding in size or amount to something else.”⁶⁰ Thus an object can be described as proportional only when the two items are compared and an appropriate balance is struck between them based on an identified value.

The essence of IHL Proportionality is the relationship or ratio between two discreet values. IHL proportionality balances two different concepts—military advantage and civilian harm. It is prospective in nature; so an attacker is obligated to estimate and compare military advantage and civilian harm at the time the attack is contemplated. IHL proportionality is rooted in humanitarianism.⁶¹ An attack is proportionate when the expected civilian harm is not excessive in relation to the expected value of the attack.

When defining IHL proportionality, it is most helpful to clearly define what it is not. IHL Proportionality is often confused with *jus ad bellum* proportionality. *Jus ad bellum* proportionality is a different animal. It balances two occasions of military force and requires a sovereign state that has been attacked to respond with force that is proportional to that already used against it.⁶² One belligerent has already used force and hence the retaliator has an existing, tangible quantity to use in its calculation. This limitation of retaliatory force is rooted in fairness in international affairs.

References to proportionality in the media are not always clear which rule they are referencing or whether they are simply using the term colloquially. During the 2006 Israel-Hezbollah war, European Union and United Nations officials criticized Israel’s response as “utterly disproportionate . . . carnage.”⁶³ This could be referencing either kind of proportionality. Three years later, United Nations

⁶⁰ *Proportionality Definition*, OXFORDDICTIONARIES.COM, <http://www.oxforddictionaries.com/definition/english/proportional>.

⁶¹ Note that the principle of proportionality does not pertain to harm to belligerents and thus if one belligerent force obliterates another force proportionality is not implicated. For example, in the Battle of Omdurman in 1898 in Sudan, British soldiers armed with gunboats, rifles, and machine guns mowed down over 20,000 Sudanese tribesmen armed mostly with swords and lances. The Sudanese suffered a 90% casualty rate, while the British lost only 48 men, amounting to 2% casualty rate. Britain’s superior weaponry, compared to the Sudanese swords and lances, resulted in one of the most lopsided victories in the military history but it did not constitute a violation of the principle of proportionality in the author’s view. Other international humanitarian law provisions, however, may have been relevant which is beyond the scope of this Article.

⁶² *Military and Paramilitary Activities in and Against Nicaragua* (Nicar. V. U.S.), 1986 I.C.J. 14, 94 (June 27).

⁶³ Keith Pavlischek, *Proportionality in Warfare*, 27 THE NEW ATLANTIS 21 (2010).

Secretary General Kofi Annan, during a briefing of the Security Council in 2006, commented that Israel's military response to Hezbollah firing rockets into Northern Israel had been disproportionate.⁶⁴ In his letter to Israel Prime Minister Sharon, Annan used the language of both paradigms. Annan uses *jus ad bellum* rhetoric when referencing the massive quantity of force used by Israel, citing F-16 fighter-bombers, helicopter and naval gunships, missiles, and bombs.⁶⁵ And he uses IHL Proportionality in decrying the harm to civilians and relief workers.⁶⁶

IHL Proportionality is codified in treaties, statutes, and is a part of binding customary international law. While the clearest articulations of IHL Proportionality are found in Protocol I Additional to the Geneva Conventions⁶⁷ (AP I), in the Statutes of the United Nations international tribunals, and the International Criminal Court (ICC),⁶⁸ the concept was evidenced as early as the American Civil War. In 1863, Abraham Lincoln issued General Order 100 during the American Civil War, commonly known as the "Lieber Code" which is widely considered the first attempt to reduce humanitarian law to writing.⁶⁹ Proportionality is obliquely set forth Article 15, which provides that "Military necessity admits of all direct destruction of life or limb of armed enemies, and of other persons whose destruction is *incidentally unavoidable* in the armed contests of war."⁷⁰

The term "incidental" is the crux of proportionality in Article 15, establishing a measure between the importance of the military objective and the level of acceptable harm to civilians injured as collateral to the attack. "Incidental" has carried over into the modern definitions, including the 1998 Rome Statute.

Proportionality was also included in an interwar treaty that did not gain a consensus, although it did demonstrate the thinking that there existed a customary rule that required the attacker to strike a balance between a military force and incidental civilian harm. The 1922 Rule

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, June 8, 1977, *available at* <http://www.icrc.org/IHL.NSF/FULL/470?OpenDocument> [hereinafter Protocol I].

⁶⁸ Rome Statute of the International Criminal Court, art. 31(1)(c), July 17, 1998, A/CONF.183/9 [hereinafter Rome Statute].

⁶⁹ William J Fenrick, *The Rule of Proportionality and Protocol I in Conventional Warfare*, 98 MIL. L. REV. 91, 95 (1982).

⁷⁰ *Id.* (emphasis added).

of Air Warfare states, “[T]he bombardment of cities, towns and villages, dwellings, or buildings is legitimate provided there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment, having regard to the danger thus caused to the civilian population.”⁷¹ However, prior to World War II proportionality was not included in any binding international treaty.⁷²

After the World War II, flush with the memory of massive civilian death, the XIX International Conference of the Red Cross (ICRC) commenced discussions on various rules to protect civilians in future armed conflicts, including a resumption of the rule of proportionality. The conference adopted a set of draft rules including Article 8(b) that provided “[The combatant] is required to refrain from the attack if, after due consideration, it is apparent that the loss and destruction would be disproportionate to the military advantage anticipated.”⁷³

While proportionality was not explicitly included in the four main Geneva Conventions of 1949 (which were largely reformulations of previous treaties), the idea continued to resonate. In 1977, the Additional Protocols (AP I and II) to the four Geneva Conventions were finalized after laborious negotiations,⁷⁴ and the rule of proportionality was included in the AP I in Articles 51(5), 57(2), and 83(b).⁷⁵

Article 51 sets forth various protections of civilians, including a prohibition against indiscriminate attacks. Paragraph 5(b) lists as an indiscriminate act, “[A]n attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian

⁷¹ Rules Concerning the Control of Wireless Telegraphy in Time of War and Air Warfare, Art. 24(4), 14 Parliamentary Papers, Cmd. 2201 (Feb. 19, 1923).

⁷² Fenrick, *supra* note 69, at 98.

⁷³ Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War, Oct. 15, 1956, ICRC, *available at* <http://www.icrc.org/applic/ihl/ihl.nsf/Treaty.xsp?documentId=FEA0B928100D3135C12563CD002D6C10&action=openDocument>.

⁷⁴ Fenrick, *supra* note 69, at 97.

⁷⁵ The term “proportionality” was intentionally omitted in order to placate a number of delegations who could not accept the theory of proportionality owing to the two concepts of military advantages and harm to civilians as being “incomparable.” See Howard S. Levie, *Protection of War Victims: Protocol to the 1949 Geneva Conventions*, 128 (Dobbs Ferry ed., Oceana Publications 1979) (Geneva Diplomatic Conference on the Reaffirmation and Development of International Law Applicable in Armed Conflicts and Geneva Diplomatic Conference for the Establishment of International Conventions for the Protection of Victims of War).

objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.”⁷⁶

Proportionality is also included in Article 57 which sets forth “precautionary measures” mandated by AP I. Paragraph 2(a) provides that

With respect to attacks, the following precautions shall be taken:

(a) those who plan or decide upon an attack shall: . . .

(iii) refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.⁷⁷

Proportionality finds a third expression in AP I in Article 85. That provision defines those violations of the AP I to be considered “grave breaches” as opposed to ordinary violations. The grave breaches differ from other provisions of IHL in that they are considered war crimes implicating criminal liability as opposed to creating state obligations.⁷⁸ Paragraphs 3(b) and 3(c) of Article 85 provide that

In addition to the grave breaches defined in Article 11, the following acts shall be regarded as grave breaches of this Protocol, when committed willfully, in violation of the relevant provisions of this Protocol, and causing death or serious injury to body or health:

(b) launching an indiscriminate attack affecting the civilian population or civilian objects in the knowledge that such attack will cause excessive loss of life, injury to civilians or damage to civilian objects, as defined in Article 57, paragraph 2 (a)(iii);

(c) launching an attack against works or installations containing dangerous forces in the knowledge that such attack will cause excessive loss of life, injury to civilians or damage to civilian objects, as defined in Article 57, paragraph 2 (a)(iii). . .⁷⁹

Even though the United States has not ratified AP I, it does recognize many of the prescriptions as binding as international customary law, including proportionality.⁸⁰

⁷⁶ Protocol I, *supra* note 67, at Art. 51(5)(b).

⁷⁷ *Id.* at Art. 57(2)(a)(iii).

⁷⁸ In addition, a state party has various other obligations toward a grave breach, including searching for persons in their territory accused of having committed a grave breach and either bringing them to trial or extraditing them to a jurisdiction that will prosecute them.

⁷⁹ Protocol I, *supra* note 67, at Art. 85(3)(b)–(c).

⁸⁰ Jason D. Wright, ‘Excessive’ Ambiguity: Analysing and Refining the Proportionality Standard, 94 INT’L REV. RED CROSS 819 (2012).

Proportionality was not explicitly included in the statutes of the United Nations International Criminal Tribunal for the Former Yugoslavia (ICTY).⁸¹ However, ICTY Chambers have found that proportionality is a rule of IHL and a rule of customary law.⁸² As such, it is prosecutable under Article 3 of the ICTY statute (violation of the laws and customs of war).⁸³ AP I Articles 51 and 57 have figured prominently in Chambers assessment that proportionality is a violation of customary international law.⁸⁴ Similar to the AP I provisions, ICTY chambers often hold disproportionate attacks are tantamount to an indiscriminate attack.⁸⁵

Proportionality was included in the statute of the ICC, known as the Rome Statute, in the 1990s. The 1998 Rome Statute includes Article 8, which criminalizes war crimes for states party to them.⁸⁶ Article 8(2)(b)(iv) proscribes a violation of the principle of proportionality as a serious violation of the laws or customs applicable in an international armed conflict.⁸⁷ It defines the war crime of a disproportionate attack as

Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term, and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.⁸⁸

As the Rome Statute was specifically codifying individual criminal liability, as opposed to AP I which proscribes general laws of war, it accordingly addresses mens rea more specifically than the other incarnations. Article 8(2)(b)(iv) specifies that the mens rea of a disproportionate attack, namely an attack committed intentionally, includes the knowledge that such attack will cause harm in excess of the military advantage. Second, the Rome Statute inserts a new type of harm to civilians to be included in the assessment of harm, namely

⁸¹ Statute of the International Criminal Tribunal For the Former Yugoslavia, S.C. Res. 827, U.N. Doc. S/RES/827 (May 25, 1993).

⁸² Prosecutor v. Galic, Case No. IT-98-29-T, Judgement and Opinion, ¶¶ 11, 58–61 (Int'l Crim. Trib. For the Former Yugoslavia Dec. 5, 2003) [hereinafter Galic Trial Judgement].

⁸³ *Id.* at ¶¶ 58–62.

⁸⁴ Iain Bonomy, *Principles of Distinction and Protection at the ICTY*, 3 FICHL OCCASIONAL PAPER SERIES 39 (2013).

⁸⁵ *Id.*

⁸⁶ Rome Statute, *supra* note 68, at art. 8.

⁸⁷ *Id.* at art. 8(2)(b)(iv).

⁸⁸ *Id.*

that of “widespread, long-term, and severe damage to the natural environment.” Third, the Rome Statute imposes a “clearly excessive” standard as opposed to merely “excessive.” Each of these will be discussed below. The United States has signed but not ratified the Rome Statute.⁸⁹

Even where a country is not a party to AP I or the Rome Statute, state practice has established the principle of proportionality as a norm of customary international law applicable in both international and non-international armed conflicts.⁹⁰ As set forth in the 2005 International Committee of the Red Cross (ICRC) study on customary international humanitarian law, the customary rule is identical to the AP I Article 51 and 57 versions:

Launching an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated, is prohibited.⁹¹

Both high-ranking and low-ranking commanders are equally bound to apply proportionality when considering an attack. The high-ranking *strategic* commander must consider the military advantage of the overall contemplated strategy, for example using UAVs as an overall tactic to weaken Al-Qaeda by eliminating key militants in Pakistan. A lower-ranking *tactical* commander must also consider military advantage in executing an attack that is part of the overall strategy, such as a UAV pilot who is charged with deploying a bomb once a target is identified.

This fact is borne out by cases at the ICTY that have applied IHL Proportionality to both scenarios; the overall proportionality of a strategic bombing campaign and the granular proportionality of a particular tactical attack.

⁸⁹ Neil Lewis, *U.S. Rejects All Support for New Court on Atrocities*, N.Y. TIMES (May 7, 2002), <http://www.nytimes.com/2002/05/07/world/us-rejects-all-support-for-new-court-on-atrocities.html> (the Rome Statute was signed on December 31, 2000, by President Clinton. President Bush subsequently renounced the United States’ obligations as a signatory through a letter to the United Nations on May 6, 2002).

⁹⁰ Jean-Marie Henckaerts, Louise Doswald-Beck & Carolin Alvermann, *Customary International Humanitarian Law: Rules*, 46 (Cambridge University Press 2005); see also Amichai Cohen & Yuval Shany, *A Development of Modest Proportions: The Application of the Principle of Proportionality in the Israeli Supreme Court Judgment on the Lawfulness of Targeted Killings*, 5 J. INT’L CRIM. JUST. 310 (2007) (“The *Targeted Killings* judgment confirms the customary status of the principle of proportionality and its applicability to all IDF military operations during armed conflicts”); Galic Trial Judgement, *supra* note 82, at ¶ 62.

⁹¹ Henckaerts et al., *supra* note 90, at 46.

In *Prosecutor v. Strugar*, the Chamber considered the criminal liability of Yugoslav General Pavle Strugar in commanding Serbia forces (JNA) during the shelling of the town of Dubrovnik from October 1 to December 6.⁹² Within the town there were legitimate military targets: a brigade of the Croatian National Guard Corps and paramilitary forces.⁹³ Between 7000 and 8000 residents lived in the Old Town, a part of Dubrovnik enclosed in medieval fortified walls and possessing “exceptional architectural heritage, including palaces, churches, and public buildings.”⁹⁴

One of the charges levied against Strugar was that the campaign was a direct or at least an indiscriminate attack against civilian targets. The Chamber found that Strugar had intentionally targeted civilians and hence it was unnecessary to address the alternative proportionality charge based on civilians being harmed incidentally.⁹⁵ In dicta, however, the Chamber weighed in on the proportionality of the December 6 shelling of the Old Town. It found that there were no “Croatian firing positions or heavy weapons in the Old Town or on its walls on 6 December 1991.”⁹⁶ It went on to state that

[T]he evidence of the alleged Croatian firing positions, even were it to be assumed to be true or that it was believed to be true, and if it were accepted in the version which is most favourable to the Defence, would not provide any possible explanation for, or justification of, the nature, extent and duration of the shelling of the Old Town that day, and the variety of positions shelled.⁹⁷

As a former ICTY Judge Iain Bonomy wrote, the Strugar Chamber had concluded that the campaign waged was “so disproportionate that

⁹² *Prosecutor v. Pavle Strugar*, IT-01-42-A, Judgment, ¶¶ 48–145 (Int’l Crim. Trib. For the Former Yugoslavia July 17, 2008) (there were several cease fires in place during this time period that failed).

⁹³ *Id.* at ¶ 22.

⁹⁴ *Id.* at ¶ 21.

⁹⁵ *Id.* at ¶ 281 (“In the present case, the Chamber notes that the Accused is charged, alternatively, with attacks which, although directed against military objectives, should have been expected to cause incidental loss of civilian life, injury to civilians or damage to civilian property, which would be excessive in relation to the concrete and direct military advantage anticipated. However, as shown elsewhere in this decision, the issue whether the attack charged against the Accused was directed at military objectives and only incidentally caused damage does not arise in the present case. Therefore, the Chamber does not find it necessary to determine whether attacks incidentally causing excessive damage qualify as attacks directed against civilians or civilian objects.”).

⁹⁶ *Id.* at ¶ 194.

⁹⁷ *Id.*

it would have amounted to an indiscriminate attack.”⁹⁸ Thus, Strugar was accountable on the basis of the entire campaign on December 6 that consisted of hundreds of shellings from many different positions was disproportionate. While the ICTY only asserted jurisdiction over General Strugar as the strategic commander, his subordinates would in theory, be accountable for specific attacks on tactical commanders.

In another case, Stanislav Galic was a General accused of waging a series of shellings and snipings against a besieged population in the town of Sarajevo. The Prosecutor in *Prosecutor v. Galic* argued to Chambers that it should “[A]nalyze the ‘concrete and direct military advantage’ at the level of each sniping and shelling incident.”⁹⁹

In making its findings, the *Galic* Chamber followed this recommendation and assessed proportionality on an incident-by-incident basis.¹⁰⁰ The Trial Chamber discussed in detail the proportionality of Scheduled Shelling Incident I, an attack in which two mortars were fired at a soccer match. The teams competing were comprised of both civilians and combatants. In terms of military advantage, the Chamber acknowledged that a significant number of [enemy] soldiers participated.¹⁰¹ Beyond the presence of enemy soldiers, no other military advantages were considered nor proffered by the defense. In assessing expected civilian harm, the Chamber stated that the spectators of the match numbered 200, including numerous children. Weighing these two criteria, the Chamber found that the particular shelling would “clearly be expected to cause incidental loss of life and excessive injuries to civilians in relation to the direct and concrete military advantage anticipated.”¹⁰² Thus, IHL Proportionality was judged in *Galic* at a tactical, granular level.¹⁰³

⁹⁸ Bonomy, *supra* note 84, at 40.

⁹⁹ *Galic* Trial Judgement, *supra* note 82, at ¶ 191.

¹⁰⁰ *Id.* at ¶ 372.

¹⁰¹ *Id.* at ¶ 387.

¹⁰² *Id.*

¹⁰³ Both Strugar and Galic in the above examples are commanding Generals, and yet Strugar is judged on the strategic proportionality of the Dubrovnik shelling campaign, while Galic is judged on the tactical proportionality of each shelling incident. The difference is attributed to the way the prosecution approached the theory of prosecution in the two cases, but both are proper expressions of the law. International criminal law provides for direct liability of military commanders where they plan and order crimes. But it also provides for command responsibility, an indirect form of responsibility based on a failure to control subordinates who commit crimes. The core of the Strugar theory of liability was Strugar’s direct responsibility for waging the campaign. The Galic theory focused on the proportionality of the separate incidents, and Galic is liable not for participating in Shelling Incident I directly but for being legally responsible for the subordinates who perpetrated the attack. The Prosecutor could have also pursued a theory

The treaty (AP I), statutory (UN Tribunals and the Rome Statute), and customary law variations of proportionality have subtle differences, but they share three main components: anticipated military advantage, expected harm to civilians, and the excessiveness determination. Each is discussed in turn.

III

MILITARY ADVANTAGE

“Anticipated military advantage” is articulated in the aforementioned treaty provisions as “a direct and concrete military advantage from the attack.”¹⁰⁴ To comprehend military advantage, its four components—military, anticipated, direct, and concrete—must be understood.

A. Military

Legitimate military objectives must confer some *military* advantage. The military advantage cannot be derived via civilian targets. For example, an attack with purpose of bringing about the capitulation of an armed force through a campaign directed against the civilian population to undermine its support for the war would not constitute a military advantage. This is true even if it brings about the end to an armed conflict.

The Commentaries to the 1977 Additional Protocol I (Commentaries) offer a narrow view of military advantage. The military advantage envisioned by the Additional Protocols is limited to attacks that gain territory or deplete the enemy force:

[E]ven in a general attack the advantage anticipated must be a military advantage and it must be concrete and direct; there can be no question of creating conditions conducive to surrender by means of attacks which incidentally harm the civilian population. A military advantage can *only* consist in ground gained and in annihilating or weakening the enemy armed forces.¹⁰⁵

This simplistic view from 1977 is difficult to apply to UAV warfare. Modern insurgent warfare will require a broader

of violation of strategic proportionality against Galic, and she could have prosecuted the tactical commander of Scheduled Shelling Incident I for a violation of tactical proportionality. The practical differences between strategic and tactical proportionality are discussed below.

¹⁰⁴ Galic Trial Judgement, *supra* note 82, at 191.

¹⁰⁵ Protocol I, *supra* note 67, at 2218 (Commentary-Protection of Civilian Population).

interpretation of the term “military” than explained by the AP 1 commentaries. “Gaining ground” is frequently not relevant because ideological insurgents are often transnational with no particular interest in territory. “Annihilating or weakening the enemy” is therefore the focus of the military advantage of UAV warfare if the commentary definition is presumed valid. With an ideological militant group, what constitutes “weakening the enemy force” can be subtle. UAV Warfare can serve to weaken a militant group by targeting leaders, thus disrupting the leadership continuity. But even targeting random fighters could arguably undermine the group’s security and confidence. One writer described the latter tactic as follows:

Killing terrorist operatives is one way to dismantle these havens. Plans are disrupted when individuals die or are wounded, as new people must be recruited and less experienced leaders take over day-to-day operations. Perhaps most importantly, organizations fearing a strike must devote increased attention to their own security because any time they communicate with other cells or issue propaganda, they may be exposing themselves to a targeted attack.¹⁰⁶

On the other hand, some pundits argue that UAV attacks have the opposite effect. They serve to strengthen the enemy because the high risk of civilian harm radicalizes the population and helps to enlist additional recruits.¹⁰⁷

In short, UAV Warfare requires a more expansive view of “weakening the enemy forces” than the 1977 commentaries suggest.

B. Anticipated

The military advantage in the proportionality equation is based on its “anticipated” value. Often, claims of UAV attacks being disproportionate are based on published reports of casualties. These claims emanate from a *post hoc* statistical analysis of an attack or campaign. However, such claims are improper as proportionality is only prospective in nature. Proportionality requires balancing the *anticipated* military advantage of the attack against the *expected* harm to civilians. Each of the values in the ratio must be assessed based on the time the attack was calculated, not on the result of the attack.¹⁰⁸

¹⁰⁶ *Id.*

¹⁰⁷ Hassan Abbas, *Are Drone Strikes Killing Terrorists or Creating Them?*, THE ATLANTIC (Mar. 31, 2013); Byman, *supra* note 22.

¹⁰⁸ See Thomas Haine, *A Legal Framework for Drone Attacks in Pakistan*, THE WITHERSPOON INSTITUTE (Jan. 26, 2010), <http://www.thepublicdiscourse.com/2010/01>

Frequently, commentators who argue that UAV Warfare is disproportionate base their argument on the results of an attack rather than the validity of the decision beforehand. The prospective nature of IHL Proportionality is borne out by comments made by states negotiating the terms of AP I. Germany stated, for example, “the decision taken by the person responsible has to be judged on the basis of all information available to him at the relevant time, and not on the basis of hindsight.”¹⁰⁹

It is useful to illustrate this point with a UAV attack targeting Baitullah Mehsud. On June 23, 2009 (hereinafter referred to as the June 23 attack), the United States had intelligence that Mehsud was attending a gathering of persons in Pakistan assembled “to mourn the deaths of people killed in drone attacks.”¹¹⁰ The United States fired two missiles at Mehsud, but failed to kill him. According to reports, 45 militants and 41 civilians were killed.¹¹¹ The appropriate analysis under AP I proportionality would revert to the time of the contemplation of the attack to evaluate the commander’s state of mind on the anticipated “direct and concrete” military advantage of targeting Mehsud. As the leader of the Pakistani Taliban, it could be argued that he inherently constitutes a significant military objective and his elimination would cripple the Taliban. When the attack is targeting a particular person (as opposed to a broader strategic objective such as the conquest of an important region) two considerations come into play. The first would be the likelihood of the particular attack in achieving the goal of elimination. The second would be the military advantage of eliminating that person.

Regarding the likelihood of success for a particular attack, proportionality would require the commander, before making the decision to proceed with the June 23 attack, to consider the results of previous attempts. Because past results inform the reasonable expectation of future acts, the duration of any campaign is relevant. The more protracted a military campaign, the more data available and

/1126. (“Since evidence is sparse, it is difficult to convincingly condemn the June 23 attack as disproportionate. Did the UAV pilots know that the rest of the crowd was mostly militants? If the pilots thought them civilians, was the value of the target from a long-term perspective worth a high loss of civilian life?”); *see also* Bonomy, *supra* note 84; Galic Trial Judgment, *supra* note 82, at 58.

¹⁰⁹ Galic Trial Judgement, *supra* note 83, n.109.

¹¹⁰ Thomas Haine, *A Legal Framework for Drone Attacks in Pakistan*, THE WITHERSPOON INSTITUTE (Jan. 26, 2010), <http://www.thepublicdiscourse.com/2010/01/1126/>.

¹¹¹ *Id.*

imputed to a commander from past results. A lengthy military campaign using consistent tactics will have the effect of negating proportionality's prospective nature as the abundance of data would set a baseline for what military advantage can be anticipated from an attack. There is a plethora of data (and opinions) on the results of UAV attacks since 2004.¹¹² One study concluded that "85 per cent [sic] of those killed between 2004 and 2012 were 'militants'" of some sort.¹¹³ However, as the targets all presented as civilians, all studies acknowledge that it is exceedingly difficult to quantify which casualties are in fact militants with certainty.¹¹⁴ The reasonableness of any assertions with regard to anticipated success of eliminating targeted suspects will be scrutinized at least publicly and very likely judicially reviewed in the context of the inferences drawn from the vast amount of data from past attacks.

Regarding the evaluation of targets in order to assess their relative military value (targeting an enemy commander versus a foot soldier), UAV Warfare is much trickier than conventional armed conflict. Conventional warfare involves clear rank and hierarchy; UAV warfare attempts to identify the leadership of irregular fighters that are hiding as and amongst civilians.

Even when a militant is identified by a UAV or through intelligence, it may not be clear whether the target is a so-called "high-value" target with a leadership role or a low-value rank-and-file fighter who poses little threat to the United States.¹¹⁵ Indeed, a Stanford University study found that there was evidence to suggest that the "vast majority" of those killed in UAV strikes in Pakistan have been low-level militants.¹¹⁶ The study goes on to say,

Based on conversations with unnamed US officials, a Reuters journalist reported in 2010 that of the 500 "militants" the CIA

¹¹² Mirza Shahzad Akbar, *The Folly of Drone Attacks and U.S. Strategy*, CNN (Oct. 4, 2012), <http://www.cnn.com/2012/10/04/opinion/pakistan-drone-attacks-akbar>.

¹¹³ Michael J. Boyle, *The Costs and Consequences of Drone Warfare*, 89 INT'L AFFAIRS 5 (2013).

¹¹⁴ *Id.* at 5–6. ("The TBIJ is more circumspect about calling the victims of drone strikes 'militants' and 'First, it is nearly impossible to verify the number of civilians killed in a drone strike.'").

¹¹⁵ *Living Under Drones*, STANFORD INT'L HUMAN RIGHTS & CONFLICT RESOLUTION CLINIC, <http://www.livingunderdrones.org/numbers/> (last visited July 31, 2013).

¹¹⁶ *Id.*, citing Adam Entous, *Special Report: How the White House Learned to Love the Drone*, REUTERS (May 18, 2010), <http://www.reuters.com/article/2010/05/18/us-pakistan-drones-idUSTRE64H5SL20100518>; Peter Bergen & Jennifer Rowland, *CIA Drone War in Pakistan in Sharp Decline*, CNN (Mar. 28, 2012), <http://www.cnn.com/2012/03/27/opinion/bergen-drone-decline/index.html>.

believed it had killed since 2008, only 14 were “top-tier militant targets,” and 25 were “mid-to-high-level organizers” of Al-Qaeda, the Taliban, or other hostile groups. His analysis found that “the C.I.A. [had] killed around 12 times more low-level fighters than mid-to-high-level” during that same period. More recently, Peter Bergen and Megan Braun of the New America Foundation reported that fewer than 13% of drone strikes carried out under Obama have killed a “militant leader.” Bergen and Braun also reported that since 2004, some 49 “militant leaders” have been killed in drone strikes, constituting “2% of all drone-related fatalities.”¹¹⁷

A different study found that “only about 2 percent of NATO’s drone kills were strategically important enemy personnel.”¹¹⁸

Low-level fighters are legitimate military targets. However, in a proportionality calculation, the value of the target is offset against the expected civilian harm. Therefore, the lower the value of the target, the less civilian harm is acceptable.

One way of identifying high-value targets is the use of so-called “signature strikes,” where the targeting criterion is not based on appreciable evidence of a combatant’s rank, but rather their “pattern of behavior.”¹¹⁹ Some critics suggest that this methodology for target selection is too lax.¹²⁰

Another method of gearing the UAV program toward high-value targets is the so-called “kill lists.”¹²¹ U.S. drone operations that target combatants in friendly states like Pakistan rely increasingly on predetermined lists of high-value targets. The kill-lists are controversial not only because of the subjective nature of selecting names in the war on terror context,¹²² but also because high-ranking

¹¹⁷ *Id.*

¹¹⁸ Adam Weinstein, *Pakistan Drones’ Success Rate: 2%*, MOTHER JONES (Jan. 3, 2001), <http://www.motherjones.com/mojo/2011/01/military-drone-afghan-success-rate-uav>.

¹¹⁹ Greg Miller, *CIA Seeks New Authority to Expand Yemen Drone Campaign*, WASH. POST (Apr. 18, 2012), http://articles.washingtonpost.com/2012-04-18/world/35453346_1_signature-strikes-drone-strike-drone-program.

¹²⁰ Boyle, *supra* note 112, at 9.

¹²¹ Jo Becker & Scott Shane, *Secret Kill List Proves a Test of Obama’s Principles and Will*, N.Y. TIMES (May 29, 2012), http://www.nytimes.com/2012/05/29/world/obamas-leadership-in-war-on-al-qaeda.html?pagewanted=all&_r=0.

¹²² Transcript of Scott Shane Radio Interview, *The Sticky Questions Surrounding Drones and Kill Lists*, (NPR Feb. 11, 2013), accessed online at <http://www.npr.org/2013/02/12/171719082/the-sticky-questions-surrounding-drones-and-kill-lists>, (New York Times Reporter Scott Shane told a radio interviewer that “As far as we’re able to tell in this very secretive process, there’s one process for the military which is quite interesting because it can involve as many as 100 people watching on video monitors in multiple agencies, and somebody presents a set of possible targets—these are individual

military and political figures are personally involved in its creation.¹²³ Several reports indicate that President Obama personally signs off on all strikes outside of Pakistan.¹²⁴ President Obama is Commander-in-Chief of the U.S. Armed Forces and can appropriately weigh in on critical military decisions. But by participating in the granular inclusion/exclusion discussion, he can inject a political component into the process calls that may question the validity of the assignment of military advantage.

One criticism of the list as an *a priori* assessment of military advantage is the dilution of the military value due to the sheer numbers on the list. Mr. Obama's own chief of staff, William M. Daley, criticized the kill list on this ground, stating, "One guy gets knocked off, and the guy's driver, who's No. 21, becomes 20? . . . At what point are you just filling the bucket with numbers?"¹²⁵

Critics have levied the charge that the White House participates in the kill-list process to restrain the overly aggressive nature of the CIA and military UAV programs:

So certainly, according to what we've heard, both the CIA and . . . the element of the military that does these strikes are pretty aggressive. They want to find targets and kill them, and so I think the role of the White House—the role that President Obama assigned to the White House—was, and to himself, was really one of restraining the agencies, double-checking the agencies, making sure that at this sort of broader strategic, political level, that there was good judgment being exercised, that you weren't taking a shot in a very marginal situation or for a marginal gain and risking a big backlash that would put the United States in a worse position.¹²⁶

The fact that intervention is required by the executive branch raises questions about the objectivity of the U.S. UAV programs and the

nominations, as they call them—to the kill list. People even refer to these as 'baseball cards' sometimes because it's essentially: Here's what the guy's name is, here's his age, here's his background, here's what we know about him, here's why we think he's a dangerous terrorist. And then it's all kicked around on this secret—but fairly open within the government—process where an agency, perhaps on the periphery of this, like the State Department, can say, 'You know, we think that guy is not important enough to kill,' or, 'We have different information. We don't think he's that bad,' or, 'We think if you took a shot at him it would disrupt our relations with such and such a country, and we don't think it's worth it.' There's really kind of a debate which ends up with either a name on the list or a name not on the list.'").

¹²³ Becker and Shane, *supra* note 119.

¹²⁴ Transcript of Scott Shane Radio Interview, *supra* note 120.

¹²⁵ *Id.*

¹²⁶ *Id.*

reliability of the assigned value placed on a target that is used to justify civilian harm.

In the end, the proportionality of an attack is judged by examining the bona fide assessment of military advantage made by the attacker. All persons who participate in the attack decision are responsible when the collective decision leads to a disproportionate attack. And an attack with little military advantage cannot be bolstered by the personal approval of a Head of State, particularly when his involvement lends a political character to the process.

C. Concrete

The term “concrete” is qualitative; it requires that the military advantage must be substantial.¹²⁷ As such, “advantages which are hardly perceptible . . . should be disregarded.”¹²⁸ The careful selection of language in Articles 51, 52, and 57 confirms the fact that the military advantage must be substantial. Article 52, which pertains only to the protection of civilian objects, employs the term “definite” (but not concrete) military advantage. The commentary to Article 52 explains that the Article 51 “concrete and direct military advantage” standard imposes stricter conditions on the attacker than the mere “definite advantage” of Article 52.¹²⁹ Thus, the inclusion of the word “concrete” in 51 was deliberate and designed to impose a higher standard.

It is important to note that while the advantage must be substantial, substantial is not absolute but contextual. A commander must assess the concreteness of the military advantage in relation to the circumstances prevailing at the time. Such factors include the stocks of different weapons available, likely future demands on those weapons, the timeliness of attack, and risks to the commander’s own forces.¹³⁰

In analyzing the concreteness of the military advantage, it is important to differentiate tactical and strategic attacks. Some critics suggest that while a UAV attack in Pakistan or Yemen may yield a

¹²⁷ Protocol I, *supra* note 67, at 2209 (Commentary-Protection of Civilian Population) (“The expression ‘concrete and direct’ was intended to show that the advantage concerned should be substantial and relatively close. . .”).

¹²⁸ Protocol I, *supra* note 67, at 2209.

¹²⁹ Protocol I, *supra* note 67, at 2218.

¹³⁰ A.P.V. Rogers, *Zero-Casualty Warfare*, 837 INT’L REV. RED CROSS 165, (Mar. 31, 2000); Final Report to Review the NATO Bombing Campaign, *supra* note 20, at ¶ 21.

tactical gain in the short term, it has an “adverse strategic effect.”¹³¹ The attacks can “fuel movements and reorde[r] the alliances and positions of local combatants.”¹³² Because ideological groups have no territorial anchor, success in one region may simply cause a group to move to another area. While there are reports that UAV warfare has had some success in Pakistan significantly weakening Al-Qaeda,¹³³ hundreds of members have “fled to battlefields in Yemen, Somalia, Iraq, Syria, and elsewhere.”¹³⁴ The displaced fighters bring skills and weapons to the new regions, turning conflicts there into “fiercer, and perhaps longer-lasting, conflicts.”¹³⁵

D. Direct

The term “direct” precludes reliance on attacks whose anticipated military advantage is derivative. An attack whose advantage would only “appear in the long term” would be too indirect.¹³⁶ Arguably, this does not preclude an attack whose *principle* value is in the long term if there is some quotient of short-term benefit.

One must keep in mind the tactical/strategic difference in examining directness. In the case of the granular tactical attack, directness would take into account the advantage of that individual attack. In the case of a military campaign (eliminating insurgents in a territory over a period of time), the advantage is perceived value of a broader objective.

Some commentators and writers have advanced the notion that proportionality permits a tactical attacker the right to consider the strategic importance of the greater military campaign (hereinafter referred to as the “full context of strategy view”). During AP I negotiations between several states gave explicit support to this view, stating that the “military advantage anticipated from an attack are [sic] intended to refer to the advantage anticipated from the attack as a whole, and not only from isolated or particular parts of the attack.”¹³⁷

¹³¹ Boyle, *supra* note 112, at 3.

¹³² Boyle, *supra* note 112, at 11.

¹³³ Boyle, *supra* note 112, at 11.

¹³⁴ Micah Zenko, *The Seven Deadly Sins of John Brennan*, FOREIGN POLICY (Sept. 18, 2012), http://www.foreignpolicy.com/articles/2012/09/18/the_seven_deadly_sins_of_john_brennan.

¹³⁵ Boyle, *supra* note 112, at 11.

¹³⁶ Protocol I, *supra* note 667, at 2209 (Commentary-Protection of Civilian Population).

¹³⁷ Fenrick, *supra* note 69, at 107 (referencing statements made by Canada).

There is support for this position in some official United States military publications. The Joint Chiefs of Staff issued a document called “Joint Targeting,” whose purpose was to provide “fundamental principles and doctrinal guidance for the conduct of joint targeting across the range of military operations.”¹³⁸ This publication addresses “operational-level considerations for the commanders of combatant commands, joint task forces, and the subordinate components of these commands to plan, coordinate, and execute targeting successfully.”¹³⁹ It discusses proportionality and provides

The military advantage anticipated is intended to refer to the advantage anticipated from those actions considered as a whole, and not only from isolated or particular parts thereof. Generally, “military advantage” is not restricted to tactical gains, but is linked to the full context of a strategy.¹⁴⁰

The text of Articles 51, 57, and 85 does not specify whether the tactical attacker is entitled to consider the “full context of strategy.” Some commentators have asserted that it can be deduced from that because what is meant by “attack” in AP I is a series of multiple acts, military advantage would necessarily be based on more than one act.¹⁴¹ Similarly, Article 57(2)(a)(i) states that those who plan or decide upon an attack shall “do everything feasible to verify that the *objectives*—in the plural—to be attacked are neither civilians nor civilian objects. . . .”¹⁴² On the other hand, Article 57 (b) specifically refers to “attack” and “objective” in the singular: “[A]n attack shall be cancelled or suspended if it becomes apparent that the objective is not a military one. . . .”

I believe that generally the full context of strategy view is an incorrect interpretation of the law. In international tribunal jurisprudence, courts have not used the full context of strategy in assessing military advantage of a granular tactical use of force. As previously discussed, the *Galic* Chamber weighed the “concrete and direct military advantage” of each sniping and shelling incident.¹⁴³

¹³⁸ JOINT CHIEFS OF STAFF, *supra* note 18, at A2–A3.

¹³⁹ JOINT CHIEFS OF STAFF, *supra* note 18, at A2–A3.

¹⁴⁰ JOINT CHIEFS OF STAFF, *supra* note 18, at E-1.

¹⁴¹ Fenrick, *supra* note 70, at 101 (concludes that because “attack,” in his view, is more than “a single soldier shooting a rifle,” therefore “concrete and direct military advantage” must likewise be referring to the advantage of the overall military campaign).

¹⁴² William J Fenrick, *Targeting and Proportionality during the NATO Bombing Campaign against Yugoslavia*, 12 EUROPEAN J. INT’L L. 489, 502 (2001) (emphasis added).

¹⁴³ *Id.* at 498.

Rather, it is clear from the ICTY jurisprudence that proportionality is based on the bona fide considerations of the person contemplating the attack. It is impermissible for an attacker to justify an attack based on information not known or actually considered by the attacker. A general commanding a belligerent force, who is planning a military campaign to attack an enemy, is privy to and entitled to consider the full context of strategy. However, a platoon commander executing a single component of the broader attack, such as ordering artillery fire on a location, would not be privy to the same intelligence as the general nor would it be reasonable for a low-ranking fighter to factor in the “full context” intelligence if he had possessed it. Thus, whether the “full context of strategy” is a legitimate consideration is not a matter of policy, but rather whether the attacker legitimately possessed strategic intelligence and had the authority to make reasonable use of it.

This position is elegantly supported by the *Strugar* Chamber, which found that the anticipated military advantage must be assessed from the perspective of the “person contemplating the attack, including the information available to the latter, that the object is being used to make an effective contribution to military action.”¹⁴⁴ Furthermore, the perspective of the attacker must be reasonable. The *Galic* Chamber held “[I]t is necessary to examine whether a reasonably well-informed person in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her, could have expected excessive civilian casualties to result from the attack.”¹⁴⁵

In this example, because General Galic was presumed to be in possession of the “full context of strategy”¹⁴⁶ by virtue of his rank and authority, it potentially could have been a bona fide consideration in this tactical decision.¹⁴⁷

However, there are unique aspects to UAV warfare wherein the full context of strategy can rightfully be utilized by the tactical commander. UAV warfare facilitates information sharing between

¹⁴⁴ *Prosecutor v. Pavle Strugar*, Case No. IT-01-42-T, Judgement, 295 (Int’l Crim. Trib. For the Former Yugoslavia Jan. 31, 2005).

¹⁴⁵ *Galic* Trial Judgement, *supra* note 83, at ¶ 58.

¹⁴⁶ However, it would not be a forgone conclusion that because the General had that information available to him that he used it in determining military advantage. There is nothing in this anecdote to suggest that he did.

¹⁴⁷ LTC JEFF A. BOVARNICK ET AL., *LAW OF WAR DESKBOOK* 194–95 (MAJ Gregory S. Musselman ed., Int’l and Operational L. Dep’t., The Judge Advocate General’s Legal Center and School, U.S. Army 2011).

strategic and tactical levels of command, sometimes described as the general-in-the-foxhole phenomenon. The simultaneous video setup affords a general the real opportunity to view an AUV attack in real time and participate in the tactical attack decision. AUV expert Peter Singer described the instance of a four-star General, recounting

[. . .] how he had spent “two hours watching footage” beamed to his office. Sitting behind a live feed of video from a Predator drone, he saw the two insurgent leaders sneak into a compound of houses. Then he waited as other insurgents entered and exited the compound, openly carrying weapons. He was now personally certain. Not only was the compound a legitimate target, but any civilians in the house had to know that it was being used for war, what with all the armed men moving about. So, having personally checked out the situation, he gave the order to strike. But his role in the operation didn’t end there; the general tells how he even decided what size bomb his pilots should drop on the compound.¹⁴⁸

A joint strategic—tactical decision could provide the occasion for a tactical fighter to legitimately employ the “full context of strategy.”

IV

EXPECTED INCIDENTAL LOSS OF CIVILIAN LIFE, INJURY, OR DAMAGE TO CIVILIAN OBJECTS

A. Expected

Like the assessment of anticipated military advantage, the calculus of civilian is prospective. It is based on what harm was expected at the time of the attack not the civilian harm that actually occurs. Referring again to the June 23 attack on Mehsud, the United States fired two missiles at Mehsud. Reports indicated that 45 militants and 41 civilians were killed.¹⁴⁹ The appropriate analysis under AP I proportionality would revert to the time of the contemplation of the attack to evaluate the commander’s state of mind regarding the expected harm to civilians and civilian structures. If the attack decision-maker expected that four civilians would be killed in the attack but forty-one civilians were actually killed, four would be the appropriate number for the civilian harm side of proportionality analysis. Moreover, if the expected harm was that forty-one civilians would be killed and only four were actually killed, forty-one should be used for the analysis.

¹⁴⁸ SINGER, *supra* note 35, at 347–48.

¹⁴⁹ Haine, *supra* note 107.

One ambiguity is just how certain the attacker must be of the resulting collateral damage and incidental injury before it is “expected.”¹⁵⁰ As previously mentioned, evidence of the results of the attack, and of similar previous attacks, will be circumstantial evidence of the attacker’s reasonable expectation of harm. Because there is a plethora of data on rate of civilian deaths in UAV strikes, and any unreasonable claim of an expectation of harm would be scrutinized in that light. The more protracted a campaign, the more experiential knowledge a military commander would be expected to acquire about past civilian harm.

Typically, battlefield decisions made in the fog of war are viewed generously because of the exigent circumstances involved.¹⁵¹ AUV pilots, on the other hand, function in a new environment. They control weapons that function in conflict areas while working in a civilian setting. They often work a shift as a UAV pilot and then go to their home living a normal civilian life. Retired Air Force Colonel Chris Chambliss once commanded UAV operations at Creech Air Force Base, when it was the command center for seven Air Force bases in the continental United States flying drones overseas.¹⁵² He states about UAV pilots that “On the drive out [to the Air Force base], you get yourself ready to enter the compartment of your life that is flying combat . . . and on the drive home, you get ready for that part of your life that’s going to be the soccer game.”¹⁵³

Another difference from the hectic battlefield is that drones have the ability to “loiter” over a target and take their time identifying militants within a civilian population. UAV pilots can monitor areas for days and even weeks (and indefinitely if multiple UAVs are deployed to the task), take their time in identifying militants, and then wait to deploy force until they are away from civilians and civilian structures.¹⁵⁴ Given that “persistent stare” methodology is the polar opposite of the hectic battlefield and fog of war, UAV commanders’ decisions on expected harm will be scrutinized more closely.

¹⁵⁰ Michael N. Schmitt, *Precision Attack and International Humanitarian Law*, 89 INT’L REV. RED CROSS 445, 457 (2005).

¹⁵¹ See LTC JEFF A. BOVARNICK ET AL., *supra* note 145, at 141.

¹⁵² David Zucchino, *Drone Pilots Have a Front-Row Seat on War, From Half a World Away*, L.A. TIMES (Feb. 21, 2010), <http://articles.latimes.com/2010/feb/21/world/la-fg-drone-crews21-2010feb21>.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

B. Incidental

Under AP I 51 and 57, it is the expected *incidental* loss of civilian life, injury or damage to structure (civilian harm) that is to be measured against the expected military advantage of the attack. The Merriam-Webster Dictionary defines incidental as “being likely to ensue as a chance or minor consequence,” or “occurring merely by chance or without intention or calculation.”¹⁵⁵ The Oxford English Dictionary defines it as “occurring or liable to occur in fortuitous or subordinate conjunction with something else of which it forms no essential part” or something “liable to happen.”¹⁵⁶ Synthesizing those definitions, there are two aspects to incidental as it applies to civilian harm. The first is the harm is unintentional. The second is the harm is subordinate or nonessential to the primary purpose of the attack (i.e., likely to ensue as a minor consequence).

One important reason why “incidental” has been integral to the definition of proportionality, from its earliest incarnations and carries over to the definition of AP I, is that it highlights the fact that civilians cannot be intentionally targeted under the Geneva Conventions under any circumstance. And incidental is important so that AP I 51 and 57 could not be used to justify an intentional attack on civilians even if the military advantage was great enough. It does not mean, however, that the harm has to be unanticipated. This is clear from the AP I commentaries that an attack on a military objective obligates a commander to calculate what the expected harm to civilians would be. The commentaries provide that:

2212 Proportionality is concerned with incidental effects which attacks may have on persons and objects, as appears from the reference to “incidental loss.” The danger incurred by the civilian population and civilian objects depends on various factors: their location (possibly within or in the vicinity of a military objective), the terrain (landslides, floods etc.), accuracy of the weapons used (greater or lesser dispersion, depending on the trajectory, the range, the ammunition used etc.), weather conditions (visibility, wind etc.), the specific nature of the military objectives concerned (ammunition depots, fuel reservoirs, main roads of military importance at or in the vicinity of inhabited areas etc.), technical skill of the combatants (random dropping of bombs when unable to hit the intended target).

¹⁵⁵ MERRIAM-WEBSTER, *available at* <http://www.merriam-webster.com/dictionary/incidental> (last visited Aug. 9, 2010).

¹⁵⁶ OXFORD ENGLISH DICTIONARY, *available at* <http://www.oed.com/view/Entry/93467?redirectedFrom=incidental#e> (last visited Aug. 9, 2010).

2213 All these factors together must be taken into consideration whenever an attack could hit incidentally civilian persons and objects. Some cases will be clear-cut and the decision easy to take. For example, the presence of a soldier on leave obviously cannot justify the destruction of a village.¹⁵⁷

The two paragraphs recognize that the expected harm depends on the contextual circumstances and that all potential risk factors should be included in the assessment. The commentary clearly states that “[i]n every attack they must carefully weigh up the humanitarian and military interests at stake.”¹⁵⁸ Thus, an attacking unit that failed to assess all of the risk factors presumably incurs liability by failing to exercise due diligence.

Not all civilians within a military objective would constitute “incidental harm.” As W. Hays Parks explains,

It is clear that the Pentagon would be a military objective in war. It should be equally obvious that a civilian working there assumes a certain risk. His or her presence would not change the nature of the Pentagon as a legitimate target. Civilians killed within an obvious military objective are not “collateral civilian casualties.” Counting civilians employed within a military objective as “collateral civilian casualties” would only encourage increased civilian presence in a military objective in order to make its attack prohibitive in terms of collateral civilian casualties.¹⁵⁹

Incidental harm refers to harm to civilians located outside the boundaries of “obvious” military objectives. This means that in the insurgency context, with belligerents hiding amidst civilians and frequenting public mosques and markets, civilians who happen to be in the same mosque do not take on the same character as civilian employees at the Pentagon. The loss of protection occurs when the military character of the location is obvious and the civilians in the location have intentionally assumed that risk.

C. Loss of Civilian Life, Injury, or Damage to Structure

Distinguishing between militants and civilians is perhaps the greatest challenge of the insurgent/UAV Warfare context. Insurgents “do their best to mix in with the civilian population.”¹⁶⁰ The difficulty of fighting in modern warfare against irregular militants is not their

¹⁵⁷ Protocol I, *supra* note 68, at ¶¶ 2212–3.

¹⁵⁸ *Id.* at ¶ 2208.

¹⁵⁹ Andru E. Wall, *Legal and Ethical Lessons of NATO’s Kosovo Campaign*, 78 INT’L L. STUD. 281, 290 (2002).

¹⁶⁰ SINGER, *supra* note 35, at 221.

killing but their identification.¹⁶¹ The International Committee of the Red Cross states that

Over recent decades, the nature of warfare has changed significantly, and several factors have contributed to blur the distinction between civilians and combatants. Military operations have moved away from distinct battlefields and are increasingly conducted inside population centres, such as Gaza City, Grozny or Mogadishu. Civilians have become more involved in activities closely relating to actual combat. Combatants do not always clearly distinguish themselves from civilians, preferring for example to operate as “farmers by day and fighters by night. “Moreover, in some conflicts, traditional military functions have been outsourced to private contractors or other civilians working for State armed forces or for organized armed groups.¹⁶²

The dividing line between when a civilian is protected under the Geneva Conventions and whose potential harm be accounted for as incidental collateral damage, and a person who is a legitimate military target is the person’s direct participation in hostilities as evidenced by their “continuous combat function,” or the carrying out of acts “which aim to support one party to the conflict by directly causing harm to another party.”¹⁶³

The ICRC provides examples of directly causing harm, including:

capturing, wounding or killing military personnel; damaging military objects; or restricting or disturbing military deployment, logistics and communication, for example through sabotage, erecting road blocks or interrupting the power supply of radar stations [i]nterfering electronically with military computer networks (computer network attacks) . . . transmitting tactical targeting intelligence for a specific attack are also examples . . . [t]he use of time-delayed weapons such as mines or booby-traps, remote-controlled weapon systems such as unmanned aircraft
¹⁶⁴

The ICRC also provides examples of acts not directly causing harm, including “the production and shipment of weapons, the construction of roads and other infrastructure, and financial, administrative and political support.”¹⁶⁵

¹⁶¹ *Id.*

¹⁶² *Direct Participation in Hostilities: Questions & Answers*, ICRC RESOURCE CENTRE (June 2, 2009), <http://www.icrc.org/eng/resources/documents/faq/direct-participation-ihl-faq-020609.htm>.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

The full exploration of the meaning of “continuous combat function” is beyond the scope of this paper, but suffice it to say it is a significant challenge in the application of IHL Proportionality to UAV warfare.

The idea has also been put forward that even if they are very high, civilian losses and damages may be justified if the military advantage at stake is of great importance. The Prosecutor’s Committee in the NATO Bombing Report suggests that proportionality may condone an attack with *significant* anticipated harm to civilians where the military advantage expected from the attack would be decisive.¹⁶⁶

This idea is contrary to the fundamental rules of the Protocol. The Protocol does not provide any justification for attacks that cause extensive civilian losses and damages. Incidental losses and damages should never be extensive.¹⁶⁷ However, it must be noted that strategic proportionality weighs the military advantage of a campaign against the expected losses of that campaign. Thus, “extensive” is itself relative. What may constitute extensive civilian losses for a single attack may be *de minimus* for the entire campaign.

V

EXCESSIVE

A. General Principles

The most difficult aspect of the proportionality analysis is establishing what amount of civilian harm is “excessive” relative to the military advantage. Observations on this task range from difficult (“the proportionality analysis is dauntingly complex”¹⁶⁸) to impossible (“the determination of what constitutes “excessive” collateral damage is unclear to the point of inapplicability”¹⁶⁹).

One difficulty is that both values are subjective and difficult to quantify. The second difficulty is that military advantage and civilian harm are wholly dissimilar and difficult to compare. And while fundamentally dissimilar they can also be interrelated so that the relative weight assigned to one value may change the value of the other.¹⁷⁰ This correlation is particularly evident in asymmetrical UAV

¹⁶⁶ Final Report to Review the NATO Bombing Campaign, *supra* note 19, at ¶ 20.

¹⁶⁷ Protocol I, *supra* note 67, at ¶ 1980 (Commentary-Protection of Civilian Population).

¹⁶⁸ Haine, *supra* note 107.

¹⁶⁹ Charli Carpenter, *Collateral Damage Control*, N.Y. TIMES (Aug. 11, 2010), http://www.nytimes.com/2010/08/12/opinion/12iht-edcarpenter.html?_r=2&.

¹⁷⁰ Haine, *supra* note 107.

warfare in urban areas. The very nature of the difficulty in identifying belligerents in a densely populated urban area and the evanescent nature of the “kill” window once a target is located may work to enhance the military advantage of the attack.

The sequence of UAV attacks targeting Mehsud is emblematic of this phenomenon. Mehsud was successful at hiding amongst civilians and had managed to avoid harm in fourteen UAV attacks. His elusiveness amongst civilians arguably elevated military advantage when he was ultimately identified.

Proportionality is frequently incorrectly portrayed as a prescription against excessive force.¹⁷¹ However, the extent of force is only relevant *in relation* to the military advantage reasonably expected;¹⁷² the standard is “excessive” not “extensive.”¹⁷³

Despite these inherent difficulties, jurisprudence of the ITCY yields several important clues about how the excessive standard will be interpreted by judges.

B. Courts Will Tend to Expand Protections of Civilians

First, courts will, when faced with IHL Proportionality, construe “as narrowly as possible the discretionary power to attack belligerents and, by the same token, so as to expand, the protection according to civilians.”¹⁷⁴ So while a few commentators and militaries have lobbied for a more expansive interpretation (“full context of strategy”), judicial review to date does not support that view.

C. Military Advantage Will Be Taken at Face Value

Second, military advantage will be taken at face value. This will be true whether the judges are assessing tactical or strategic proportionality. In *Struger*, the issue was the proportionality of the

¹⁷¹ Schmitt, *supra* note 148; see Cohen & Shany, *supra* note 90, (“the St Petersburg declaration of 1868 that condemns the . . . ‘employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable’”); Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight, 1 A.J.I.L. Supp. 95 (Dec. 11, 1868) [hereinafter Declaration Renouncing Explosive Projectiles], (this, as well as the general prohibition on methods of warfare that cause superfluous injury or unnecessary suffering that is found in AP-I, Art. 35(2), reflects an aversion of *excessive damage*) (emphasis added).

¹⁷² Schmitt, *supra* note 148; see Cohen & Shany, *supra* note 90; Declaration Renouncing Explosive Projectiles, *supra* note 169.

¹⁷³ Schmitt, *supra* note 148.

¹⁷⁴ Prosecutor v. Zoran Kupreskic et al., Case No. IT-95-16-T, Judgment, ¶ 525 (Int’l Crim. Trib. For the Former Yugoslavia Jan. 14, 2000).

Dubrovnik shelling campaign.¹⁷⁵ The judges assessed military advantage based simply on the number of arguable military targets in the vicinity of the town. The timing and relative value of particular targets as a matter of overall strategy was not raised nor contemplated. In *Galic*, Chambers considered proportionality of shellings and snipings of Sarajevo.¹⁷⁶ Beyond the presence of enemy soldiers, no other military advantages were considered nor proffered by the defense. Without going beyond the basic statistics of the number of combatants and civilians, the Chamber rendered its decision.”¹⁷⁷ This may be attributable to the reluctance of civilian judges to dig too deep into military thinking, or it could be the failure of defense counsel to proffer those arguments. However, delving into more complex constructions of military advantage may be practically precluded by the high degree of subjectivity and the fact that in many situations the best source of that kind of evidence would be the testimony of the defendant.

D. The Type of Weapon Used Will Be Relevant

Third, the type of weapon utilized is relevant to the excessiveness calculation. In *Prosecutor v. Tihomir Blaskic*, the Trial Chamber considered the proportionality of attacks against the town of Stari Vitez in central Bosnia. The Trial Chamber inferred from the “arms used that the perpetrators of the attack had wanted to affect Muslim civilians.”¹⁷⁸ While the Chamber found that the attacks were directed at civilians as opposed to being a defensive response to military aggression, it concluded that even if there had been such aggression the use of heavy sophisticated weapons and the methods used “could not be deemed proportionate to it.” The Chamber added that Blaskic knew that the use of heavy weapons to seize villages mainly occupied by civilians would have “consequences out of all proportion to military necessity.”¹⁷⁹

E. Battlefield Decisions Will Be Viewed More Leniently

Fourth, judges will view an *ad hoc* attack decision in the heat of battle with more leniency than a premeditated attack or a protracted

¹⁷⁵ Strugar Judgment, *supra* note 93, at ¶ 179.

¹⁷⁶ Galic Trial Judgment, *supra* note 83, at ¶ 387.

¹⁷⁷ *Id.*

¹⁷⁸ *Prosecutor v. Tihomir Blaskic*, Case No. IT-95-14-T, Judgment, ¶ 507 (Int’l Crim. Trib. For the Former Yugoslavia Mar. 3, 2000).

¹⁷⁹ *Id.* at ¶¶ 651–53; Bonomy, *supra* note 84, at 38.

series of attacks. Attacks subject to a proportionality review can be broken down into two categories. The first type consists of attacks that are premeditated in nature, decided only after careful consideration of the circumstances. The second type consists of attacks that, given the circumstances, are conducted under exigent circumstances and thus without the same contemplative ability. The second type would include attacks required to eliminate an immediate and serious threat, for example when UAV operators identifies a suspected suicide bomber in or heading toward a civilian area. Another example might be a “return fire” scenario, where enemy artillery fire must be responded to immediately to neutralize the weapon or in order to prevent flight of the combatants.

For obvious reasons, tribunals judging the proportionality of an attack would grant far more discretion to commanders in the latter “urgent” category as opposed to the premeditated variety. In the *Galic* case, for example, the Trial Chamber found the shelling of the soccer match to be disproportionate¹⁸⁰ when there were no exigent circumstances in evidence that required targeting those soldiers at that moment and there was no reason the attackers could not have waited until the risks to civilians were minimized. There was no exigency involved in targeting a few low-ranking soldiers playing in a soccer match: They offered little in the way of military advantage and the attacker had the option of waiting until the match ended. Thus the Chamber summarily concluded the attack was disproportionate.

Other commentators share this view. The Israel Air Force conducted an attack on Hamas militants intermingled in a civilian population within the Gaza Strip on December 27, 2008, at the onset of Operation Cast Lead, “probably in accordance with a menu of objectives prepared some time in advance”¹⁸¹ Commenting on the proportionality of the attack, the author suggests that this kind of attack would be held to a higher standard by virtue of the fact it was premeditated. He states that “[O]nce an operation is already under way, commanders should be held to a different standard for ad hoc military decisions when time and resources are lacking to gather and analyze information regarding the potential results of their actions.”¹⁸²

¹⁸⁰ See *Galic* Trial Judgment, *supra* note 82, at ¶ 387.

¹⁸¹ Amichai Cohen, *The Principle of Proportionality in the Context of Operation Cast Lead: Institutional Perspectives*, 35 RUTGERS L. REC. 23 (June 21, 2000).

¹⁸² *Id.*

With UAV Warfare, the loitering capability of the UAV operation is the new form of premeditation. Unless there are exigent circumstances, the UAV unit can follow the target until the target is in an area where civilian harm is minimized. Lt. Colonel Chris Gough, a UAV pilot who previously piloted manned F-16 fighter jets, explained that the drone unit did not mistakenly hit civilian targets because they have “the resources to make sure we’re right.”¹⁸³

F. Mens Rea Has Objective and Subjective Components

Fifth, in the criminal context, the mens rea of a disproportionate attack has both objective and subjective components. Regardless of what conclusions the attacker actually made with regard to the excessiveness of civilian harm, the circumstances will be judged objectively. This was the position advanced by the committee assembled by the Prosecutor of the ICTY to investigate whether the North Atlantic Treaty Organization (NATO) had violated principles of proportionality in bombing Serbia.¹⁸⁴ On the issue of the appropriate standard of review, the committee suggested “the decisive yardstick should be the judgment of the ‘reasonable military commander.’”¹⁸⁵ This is similar to the view of Chambers at the ICTY. In *Galic*, the Chamber employed the standard of a reasonably well-informed *person* in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her.¹⁸⁶

This comports with the views of many militaries, whose own manuals advance an objective standard. The manual used by Canadian armed forces, for example, indicates “consideration must be paid to the honest judgment of responsible commanders, based on the information reasonably available to them at the relevant time, taking fully into account the urgent and difficult circumstances under which such judgments are usually made.” It also indicates that the

¹⁸³ Lara Logan, *60 Minutes: Drones: America’s New Air Force* (CBS television broadcast Nov. 5, 2009), available at http://www.cbsnews.com/stories/2009/05/08/60_minutes/main5001439_page2.shtml?tag=contentMain;contentBody.

¹⁸⁴ See Final Report to Review the NATO Bombing Campaign, *supra* note 19, at ¶¶ 20–24.

¹⁸⁵ Michael Bothe, *The Protection of the Civilian Population and NATO Bombing on Yugoslavia: Comments on a Report to the Prosecutor of the ICTY*, 12 EUR. J. INT’L L. 531, 535 (2001).

¹⁸⁶ *Galic* Trial Judgement, *supra* note 83, at ¶ 58 (emphasis added).

proportionality test must be examined on the basis of “what a reasonable person would do” in such circumstances.¹⁸⁷

The difference of opinion appears to be whether the objective standard is based on a reasonable military commander or a reasonable civilian. Unlike the NATO committee, the *Galic* Chamber at the ICTY and the Canadian military manual do not express the standard in terms of a reasonable military commander, but that of a reasonable person of an undefined character in the circumstances of the actual commander. In the case of the ICTY, this may be explained at least in part by the fact that the Balkan conflict involved so many civilians serving *ad hoc* in the military and quasi-military positions. Other scholars have suggested as well that it is preferable for civil society to set the underlying values of proportionality, forcing the military to conform to those values, and not vice-versa.¹⁸⁸

The circumstances of an attack include the arsenal available to the attacker and their capabilities. Drones are the most accurate¹⁸⁹ means of deploying bombs the United States has ever possessed. In World War II, conventional bombs dropped from aircraft were accurate to within 3,300 feet of their target. In the Korean War, the accuracy was improved to 1,000 feet. In Vietnam, the accuracy was improved to 400 feet, in Operation Desert Storm to 200 feet, and in the Balkan Wars to 40 feet.¹⁹⁰ Drones render all of these statistics obsolete. Drones have pinpoint accuracy thanks to laser and global satellite positioning systems.¹⁹¹ They have the ability to loiter or track a target (“persistence”), which allows the attacker to delay an attack to minimize collateral harm.¹⁹² Bombs are deployed by two kinds of

¹⁸⁷ Law of Armed Conflict at the Operational and Tactical Levels, Can., B-GJ-005-104/FP-021, § 5 ¶ 27, (Aug. 13, 2001). *See also* Law of Armed Conflict, Commander’s Guide, 37 AUSTL. DEF. FORCE PUBLICATION SUPP. 1, 9–10 (Mar. 7, 1994); New Zealand, Interim Law of Armed Conflict Manual, DM 112, N.Z. DEF. FORCE, ¶ 515(4), (Nov. 1992); Yugoslav Regulation on the Application of international Laws of War in the Armed Forces of the SRFY, ¶ 72 (1988).

¹⁸⁸ Bothe, *supra* note 183, at 535.

¹⁸⁹ Technical accuracy of a weapon is its capability of striking an intended target. This of course says nothing about the accuracy of the intelligence, analysis or methodology of target selection.

¹⁹⁰ Wall, *supra* note 157, at 286.

¹⁹¹ *See Flight of the Drones: Why the Future of Air Power Belongs to Unmanned Systems*, THE ECONOMIST (Oct. 8, 2011), <http://www.economist.com/node/21531433>; *see Drones: What Are They and How Do They Work?*, BBC (Jan. 31, 2012), <http://www.bbc.co.uk/news/world-south-asia-10713898>.

¹⁹² *Id.*

drones, the MQ-1 Predator and the MQ-9 Reaper.¹⁹³ The Predator and Reaper deploy Hellfire missiles, which are small, 100-pound missiles that can be fitted with a comparatively small warhead (2.2 pounds of explosive) that limits collateral harm.¹⁹⁴ They are generally considered capable of destroying small targets such as vehicles without destroying surrounding objects. When the proportionality of an attack is scrutinized in the future, the increasing precision and discriminatory capabilities of drones will be imputed to the attacker. This will place great pressure on the attacker to avoid civilian harm¹⁹⁵ because the attacker will have the technical ability to do so.

While “excessiveness” is judged by the reasonable person standard, the perpetrator must be shown to have actual knowledge of the circumstances that give rise to the conclusion the attack was disproportionate. The *Galic* Chambers relied on Article 85(3)(b) of AP I in finding that to establish the mens rea for a violation of proportionality: “the Prosecution must prove . . . that the attack was launched willfully and in knowledge of circumstances giving rise to the expectation of excessive civilian casualties.”¹⁹⁶

In practice, evidence of the attacker’s actual knowledge at the time of the attack can be difficult to secure, leaving prosecutors with circumstantial arguments. In *Galic*, for example, the duration of the sniping and shelling campaign lasted four years and that effectively precluded *Galic* from arguing a lack of knowledge. In those circumstances, the Chamber was willing to infer knowledge.¹⁹⁷ In other cases, where it is established that the attacker was in receipt of some information that triggered a duty to inquire further and he failed to do so, Chambers have imputed knowledge based on a duty to inquire further accompanied by a failure to do so.¹⁹⁸

Thus, because of the protracted nature of the conflicts in the Afghanistan, Iraq, and Pakistan theatre, and specifically hundreds of

¹⁹³ *Id.*

¹⁹⁴ *Predator RQ-1/MQ-1/MQ-9 Reaper UAV, United States of America*, AIRFORCE-TECHNOLOGY.COM (2012), <http://www.airforce-technology.com/projects/predator-uav/>; see also THE ECONOMIST, *supra* note 189.

¹⁹⁵ Schmitt, *supra* note 148.

¹⁹⁶ *Galic* Trial Judgment, *supra* note 82, at ¶ 59.

¹⁹⁷ *Id.* at ¶ 745.

¹⁹⁸ Prosecutor v. Rasim Delic, Case No. IT-04-83-T, Judgment, ¶ 553 (Int’l Crim. Trib. For the Former Yugoslavia Sept. 15, 2008), (“The Majority finds that Rasim Delic’s imputed knowledge based on his receipt of Bulletin 137 was sufficient to trigger his duty to enquire with a view to punish after the crime of cruel treatment had actually been committed.”).

drone attacks with reports of civilian casualties,¹⁹⁹ it would be difficult for a UAV commander to successfully argue he or she lacked knowledge of the potential for civilian harm.

Proportionality in the Rome Statute also requires that the perpetrator knew of the circumstances that gave rise to the expectation that the attack would be clearly excessive.²⁰⁰ The ICC Element of Crimes goes on to explain

[T]his knowledge element requires that the perpetrator make the value judgement as described therein. An evaluation of that value judgment must be based on the requisite information available to the perpetrator at the time.²⁰¹

The Rome Statute codifies a higher standard than the ICTY, even though the *Galic* Chamber held that the attack was “clearly excessive” and may have, in effect, applied that same standard. The NATO bombing committee set up the ICTY prosecutor indicated in its report that the use of the word “clearly” ensures that criminal responsibility would be entailed only in cases where the excessiveness of the incidental damage was obvious.²⁰² The use of the word “clearly” ensures that proportionality amounts to a war crime where the excessiveness of incidental damage was obvious but not in cases that involved mere errors of judgment by commanders in the field.²⁰³

While the Rome Statute explicitly states that it does purport to change customary law, there some commentators have asserted that the “clearly excessive” standard under the Rome Statute may reflect custom.²⁰⁴ Therefore it would be prudent when analyzing proportionality to UAV warfare to assume that the Rome Statute version (clearly excessive) will be the standard applied.

G. Harm to Objects Will Be Given More Latitude

Sixth, “acceptable” civilian harm will be viewed more leniently when it does not entail physical harm to people. The parameters of the discussion during the AP 1 negotiations shed light on the mindset of States in the 1970s about the era’s view of allowable civilian harm. Countries advancing the concept of proportionality made reference to

¹⁹⁹ Bergen & Tiedemann, *supra* note 24.

²⁰⁰ Elements of Crimes, Int’l Crim. Ct. Doc. No. ICC-PIDS-LT-03-002/11, 21 (2011).

²⁰¹ *Id.* at 37.

²⁰² Final Report to Review the NATO Bombing Campaign, *supra* note 19, at ¶ 21.

²⁰³ Rogers, *supra* note 128.

²⁰⁴ Cohen & Shany, *supra* note 90.

almost negligible allowable casualties. Canada declared that the incidental loss of a single civilian would not be considered excessive when weighed against a “major” military objective.²⁰⁵ The United Kingdom expressed a similar sentiment, stating that it was “difficult to visualize an attacker who would not carry out an assault upon an entrenched adversary because of the presence of one or two civilians.”²⁰⁶

Both views are expressed in the context of one or two civilian deaths—even in the case of Canada measured against major military objectives. Contextually, the statements infer that the view on acceptable civilian harm was extremely modest, measured in single civilian casualties, not tens or hundreds.

This proposition is further supported by the contrast with language used to explain proportionality with regard to civilian property. The commentaries explain that “if the destruction of a bridge is of paramount importance for the occupation or non-occupation of a strategic zone, it is understood that some houses may be hit, but not that a whole urban area be leveled.”²⁰⁷

Here, the quantitative language is more relaxed. In this instance, “some houses” is clearly proportional within the lower threshold and the upper threshold is only limited to something less than “an entire urban area.” Implicit in these contrasting terms is a two-tiered approach to determining “excess”: a higher scrutiny where the expected harm includes loss of human lives, a lower scrutiny where the harm is limited to objects or structures.

H. Low-Ranking Soldiers Will Generally Not Confer a Lot of Military Advantage

Seventh, one can glean from the ICTY jurisprudence that low-ranking soldiers will not constitute much of a military advantage absent some exigent circumstances.

An attack targeting a low-ranking soldier which is used to justify civilian harm will be viewed skeptically. This was evident in the *Galic* case, where the Trial Chamber ruled on the proportionality of the mortar attack on a soccer match that included both low-ranking

²⁰⁵ Fenrick, *supra* note 69, at 106.

²⁰⁶ Fenrick, *supra* note 69, at 106.

²⁰⁷ Protocol I, *supra* note 67, at ¶ 2214 (Commentary-Protection of Civilian Population).

soldiers and civilians.²⁰⁸ The Chamber assigned little value to the attack directed at low-ranking soldiers that would incur certain civilian harm, even where there were soldiers were present in “significant numbers.” It argued that

[H]ad the [attacking] . . . troops been informed of this gathering and of the presence of [enemy] . . . soldiers there, and had intended to target these soldiers, this attack would nevertheless be unlawful. Although the number of soldiers present at the game was significant, an attack on a crowd of approximately 200 people, including numerous children, would clearly be expected to cause incidental loss of life and injuries to civilians excessive in relation to the direct and concrete military advantage anticipated.²⁰⁹

What is important about this finding is that soldiers had no particular strategic or tactical value by virtue of their combat assignment. They were not defending territory or a military asset, nor were they engaged in the moment of the attack in a particular military operation. The sole military value of the soldiers at the time of the attack was the fact they were enemy combatants. The Trial Chamber did not explicitly quantify the expected military advantage of the attack, but it is clear the Chamber did not consider the elimination of individual combatants as conferring a significant military advantage.

A United Nations fact-finding mission came to a similar conclusion. The United Nations established a mission to investigate the Israeli invasion of the Gaza Strip in 2009.²¹⁰ In one incident, the Mission found that Israel had deliberately attacked policemen, a percentage of whom were also Hamas militants. None of the militants were identified in the report as having any particular military value because of rank or function. Nor were any militants in active combat functions such as preparing a rocket for launch. Like Galic, some of policemen were combatants and hence legitimate military targets. But in the face of certain civilian harm, killing low-ranking militants did not confer a significant direct and concrete military advantage—at

²⁰⁸ See Chuck Sudetic, *Mortar Fire Kills 12 at Soccer Game in Bosnian Capital*, N.Y. TIMES (June 2, 1993), <http://www.nytimes.com/1993/06/02/world/mortar-fire-kills-12-at-soccer-game-in-bosnian-capital.html>; Kurt Schork, *Blood and tears end a soccer game which no one could win*, THE GUARDIAN (June 2, 1993), <http://www.theguardian.com/world/1993/jun/02/warcrimes.fromthearchive>; 1993: *Serb attack on football match kills 11*, BBC (June 1, 1993), http://news.bbc.co.uk/onthisday/hi/dates/stories/june/1/newsid_2493000/2493441.stm.

²⁰⁹ Galic Trial Judgement, *supra* note 82, at ¶ 387.

²¹⁰ U.N. Human Rights Council, *Human Rights in Palestine and Other Occupied Arab Territories: Report of the United Nations Fact Finding Mission on the Gaza Conflict*, ¶ 1720, U.N. Doc. A/HRC/12/48 (Sept. 25, 2009) [hereinafter Goldstone Report].

least any that justified the civilians put at risk with the attack. The report concluded that there was a *prima facie* case that the attacks were disproportionate attacks in violation of customary international law.²¹¹ The clear inference here is that an attack against low-ranking combatants who are not engaged in imminently dangerous activities will be assigned a marginal military advantage.

There is every reason to think that this logic would carry over to drones in the UAV Warfare context. Unless an insurgent is engaged in a threatening activity such as placing an explosive device, his elimination would not justify harm to civilians particularly when the persistent stare ability of the UAV would allow them to tracking the target until the risk to civilian harm is virtually eliminated or at least minimized. This seems to be the case in the conventional armed conflicts in Iraq and Afghanistan, where there is evidence to support the view that the U.S. Military also assigns a low military advantage to the elimination individual insurgents in armed conflict areas like Afghanistan and Iraq.

One thing for certain is that the United States clearly understands that UAV Warfare gives them an unprecedented ability to be cautious in avoiding civilian harm if they so choose. An operations officer for an unmanned aircraft systems training battalion who had served several tours of duty in Iraq stated to the author at the Association for Unmanned Vehicle Systems International “Unmanned Systems North America” conference in August 2010 that his understanding as a commander was that the Rules of Engagement (ROE) forbade him from inflicting *any* civilian casualties.²¹² The United States Rules of Engagement applicable to Iraq, publicly leaked to Wikileaks.com, forbids any use of force except when a target is positively identified as a combatant. The ROE begins with the statement the proportionality is the operative principle when using force: “At all times, the requirements of necessity and proportionality will form the basis of the judgment of the on-scene commander (OSC) or individual as to what constitutes an appropriate response in self-defense to a particular hostile act or demonstration of hostile intent.”²¹³

²¹¹ *Id.*

²¹² The officer spoke to the author on the condition of anonymity. It is significant that the officer served in the capacity as the operations officer for a battalion whose function it was to train army personnel on how to operate unmanned aircraft systems; *see also* UNITED STATES ARMY UNMANNED AIRCRAFT SYSTEMS TRAINING BATTALION, <http://www.sitelineaz.com/WEB410/Craig/> (last visited Sept. 1, 2010).

²¹³ US Rules of Engagement for Iraq, WIKILEAKS (Feb. 4, 2008), http://wikileaks.org/wiki/US_Rules_of_Engagement_for_Iraq.

There is no explanation about what proportionality means. However, the subsequent two paragraphs that set forth a very restrictive policy of the application of force. Paragraph 3.A.(4) requires that “[a]ll personnel must ensure that, prior to *any engagement*, non-combatants and civilian structures are distinguished from proper military targets.”²¹⁴

This provision goes beyond that language of AP I, Article 57(2)(a)(i) that generally requirement an attacker to make all feasible efforts to distinguish between civilians and combatants. Paragraph 3.A.(4) forbids all use of force until a *positive* identification is made. The effect of this rule is to severely minimize, if not avoid, collateral civilian harm. The next paragraph, Paragraph 3.A.(5), is similarly restrictive. It requires that “[p]ositive Identification (PID) of *all targets* is required prior to engagement. PID is a reasonable certainty that the individual or object of attack is a legitimate military target in accordance with these ROE.”²¹⁵

While neither paragraph directly addresses proportionality, both clearly establish a framework in which in the armed conflict in Iraq the United State assigns is tolerating a low level of collateral harm.

This is supported by a publicly aired television news segment on UAV operations at Creech Air Force Base. The segment provided several instances the Air Force exploited the loitering capability of drones to take extraordinary caution in the instance of a single, low value suspected enemy combatant.²¹⁶ In one case, the belligerent was a suspected sniper, and the UAV unit requested the ground forces to “start your engines and just move ten meters for me” to provoke the suspect into action, thus confirming the identification.²¹⁷ The tactic worked, and the infrared cameras of the UAV could detect the sniper pulling his rifle out and were able to engage that individual.

The allure of precision, however, can create an unrealistic expectation of its possibilities that would serve to impose unreasonable demands on the military or postulate norms to completely eliminate collateral damage.²¹⁸ But while the precision of weaponry continues to increase, the prevalence of asymmetrical conflicts against irregular combatants hiding within civilian

²¹⁴ *Id.* at E-1-6, (emphasis added).

²¹⁵ *Id.* at E-1-6, (emphasis added).

²¹⁶ Logan, *supra* note 181.

²¹⁷ *Id.*

²¹⁸ Schmitt, *supra* note 148.

populations decreases the margin of error between combatant and civilian targets. Thus, the attack against Baitullah Mehsud on the rooftop of a home occupied by twelve other persons in an urban area may have represented the best alternative in terms of humanitarian risk. The UAV could precisely target the home, and it could deploy a bomb that minimized the risk to surrounding structures. In theory, the United States could have deployed ground forces to engage Mehsud directly in order to spare the other civilians in the building. However, he was an evanescent target and in terms of military advantage, the United States would be entitled to factor in the risk that ground forces would alert Mehsud of their presence and increase the risk of his escape. In terms of collateral damage, there is no certainty that engagement by ground forces would have been able to decrease the risk to civilians, but it certainly would have increased the risk of own-side losses.

I. Cumulative Effect Doctrine Will Come into Play with UAV Warfare

Eighth, when strategic proportionality is at issue, the “cumulative effect” doctrine may come into play. The cumulative effect doctrine was first articulated in the ICTY *Kupreskic* Trial Judgment, where that Chamber concluded that an extended campaign consisting of a series of attacks, each of which might be a close call in regards to proportionality, in the end would lead to the conclusion that the campaign was disproportionate because of the “cumulative effect” on civilians. The Trial Chamber found that

[I]t may happen that single attacks on military objectives causing incidental damage to civilians, although they may raise doubts as to their lawfulness, nevertheless do not appear on their face to fall foul *per se* of the loose prescriptions of Articles 57 and 58 (or of the corresponding customary rules). However, in case of repeated attacks, all or most of them falling within the grey area between indisputable legality and unlawfulness, it might be warranted to conclude that the cumulative effect of such acts entails that they may not be in keeping with international law. Indeed, this pattern of military conduct may turn out to jeopardize excessively the lives and assets of civilians, contrary to the demands of humanity.²¹⁹

This was interpreted by the ICTY NATO Committee as follows:

This formulation in *Kupreskic* can be regarded as a progressive statement of the applicable law with regard to the obligation to protect civilians. Its practical import, however, is somewhat

²¹⁹ *Kupreskic*, *supra* note 172, at ¶ 526.

ambiguous and its application far from clear. It is the committee's view that where individual (and legitimate) attacks on military objectives are concerned, the mere *cumulation* of such instances, all of which are deemed to have been lawful, cannot *ipso facto* be said to amount to a crime. The committee understands the above formulation, instead, to refer to an *overall* assessment of the totality of civilian victims as against the goals of the military campaign.²²⁰

J. The Enemies' Criminality Will Be Taken into Account

Ninth, a tribunal would take into account the enemy's criminality in an "excessive" analysis.

An emblematic aspect of modern warfare is the asymmetry of the combatant forces. In Operation Cast Lead, Israel faced Hamas belligerents who hid amidst the civilian population in Gaza. In Iraq, Afghanistan, Pakistan, and Yemen, among others, the United States is fighting against irregular forces who dress as civilians and intermingling with them in urban areas. This tactic is designed in part to use the civilians as a human shield, assuming that unrestrained combat against a mixed combatant and civilian population is untenable. It also allows the irregular force to claim a public relations victory by publicizing civilian fatalities incurred when a particular belligerent is killed by a drone. Al-Qaeda, Hamas, and other irregular combatant forces violate humanitarian law on an ongoing basis when they use civilians as human shields in an attempt to protect, conceal, or render military objects immune from military operations or force them to leave their homes or shelters to disrupt the movement of an adversary.

However, the criminality of an irregular force such as the Taliban does not relieve the attacker of its obligation to comply with the principle of proportionality. The *Galic* Chamber so held, finding "[T]he failure of a party to abide by this obligation does not relieve the attacking side of its duty to abide by the principles of distinction and proportionality when launching an attack."²²¹

The official position of the United States military is in accord, providing that "[i]n such cases, otherwise lawful targets shielded with protected civilians may be attacked, and the protected civilians may be considered as collateral damage, provided that the collateral

²²⁰ Final Report to Review the NATO Bombing Campaign, *supra* note 19, at ¶ 52.

²²¹ *Galic* Trial Judgement, *supra* note 82, at ¶ 61.

damage is not excessive compared to the concrete and direct military advantage anticipated by the attack.”²²²

Academics argue that any tribunal considering an attack in such circumstances would enforce the principle of proportionality but would “be obliged to weigh in the balance in favor of the attackers any such illegal activity by the defenders.”²²³ Or in other words, that the tribunal would likely impose a higher “excessive” liability threshold in a criminal prosecution for a violation of proportionality.

A related issue in asymmetrical conflicts is whether or not there is any requirement under international law to put your own-side forces at risk if doing so would vitiate the anticipated harm. The United States currently justifies using drones for the reason that it is an effective tactic against irregular combatants hiding in civilian areas coupled with the fact that it doesn’t put any United States personnel at risk. A commander is entitled to factor the risk to his own troops, equipment, and supplies when assessing the military advantage of an attack.²²⁴ As previously stated, a commander is allowed to take into consideration that own-side losses a factor decreasing the anticipated military advantage. And there is no express requirement in AP I for commanders “to place themselves or their subordinates at risk in order to avoid harm to civilians and civilian property.”²²⁵ Commanders are obligated to consider the impact of a tactic on the civilian population.²²⁶ Experts have asserted that “[i]t is reasonable to require military forces to assume some degree of risk to avoid collateral damage and incidental injury” and that “the greater the anticipated collateral damage or incidental injury, the greater the risk they can reasonably be asked to shoulder.”²²⁷ By this analysis, the

²²² JOINT CHIEFS OF STAFF, *supra* note 18, at A2–A3.

²²³ Rogers, *supra* note 128.

²²⁴ There is some historical precedent for this position. In World War II, the United Kingdom embarked on a campaign to bomb northern Germany. It began with daytime bombing missions, but suffered significant losses due to German antiaircraft batteries that could sight and fire at the incoming bombers. Consequently, the United Kingdom changed its strategy to a campaign of nighttime bombing. This had the effect of lessening its own-side losses but increasing German civilian casualties due to the decreased accuracy of the night sorties. During the NATO intervention in the Balkan War in the 1990s, NATO similarly deployed its bombers at high altitudes that decreased the risk of NATO forces from antiaircraft fire but increased the harm to civilians.

²²⁵ Schmitt, *supra* note 148.

²²⁶ Schmitt, *supra* note 148.

²²⁷ Schmitt, *supra* note 148; *see also* Fenrick, *supra* note 140, at 489–502, (“Determining the extent to which a military commander is obligated to expose his own forces to danger in order to limit civilian casualties or damage to civilian objects is very difficult. Strictly speaking, resolution of the proportionality equation requires a

United States would not be permitted to adopt a strategy with drones that elevates the protection of its own forces over humanitarian concerns. In the Mehsud attack, therefore, it would have been incumbent upon the commander to consider the available alternatives to the UAV attack and assume some risk of own-side harm.

While UAV warfare in theory could eliminate the risk of own-side losses in certain circumstances, in current U.S. practice in Iraq and Afghanistan it does not. In Iraq and Afghanistan the U.S. military requires confirmation by ground forces in order to confirm identification. An ABC news report on drones was given security clearance to interview a unit of UAV operators piloting drones in Afghanistan in 2010.²²⁸ The news team documented one instance where five insurgents were seen to be planting an improvised explosive device (IED) on a UAV video feed in an area known for the use of IEDs. Before the UAV could deploy lethal force, the UAV pilots explained to the reporters that the ROE required positive confirmation of the targets by a ground force. The practice was to not take any chances that the five persons may be civilians. The capabilities of the drones allowed for the drones to furtively track the suspects while a ground force moved and established direct contact.²²⁹

Ground force confirmation, unlike a UAV attack alone, injects risk into the equation because live soldiers are deployed in conflict zone. In Pakistan, Yemen, and Somalia, however, the United States does not have the same ability to deploy soldiers on the ground to gather intelligence, and yet we use lethal force in these places nonetheless. In Iraq and Afghanistan, the calculation of expected civilian harm would include the ground confirmation policy. And in places where ground confirmation is not an option, the commander must factor that in calculation of expected harm.

determination of the relative worth of military advantage gained by one side and the civilian casualties or damage to civilian objectives incurred in areas in the hands of the other side. A willingness to accept some own-side casualties in order to limit civilian casualties may indicate a greater desire to ensure compliance with the principle of proportionality. Military commanders do, however, also have a duty to limit casualties to their own forces.”).

²²⁸ *The Drone Wars: 21st Century Warfare* (ABC television broadcast Jan. 12, 2010), available at <http://abcnews.go.com/wnt/video/playerIndex?id=9545470>; see also Bill Weir, *Our Reporter on Pakistan-Afghanistan Border: Drones and Diplomatic Efforts*, ABC NEWS (Jan. 12, 2010), <http://abcnews.go.com/WN/Afghanistan/abcs-bill-weir-reporting-afghanistan-influence-predator-drones/story?id=9542900>.

²²⁹ As it turned out, the five suspected insurgents were children gathering firewood.

CONCLUSION

One scarcely encounters an article about a drone attack in the newspaper without a quote from an expert or academic who comments on the attack's lack of proportionality. Rarely if ever do these articles examine these conclusions or take the time to consider IHL Proportionality in careful detail. In this Article I have attempted to do just that. IHL Proportionality is elegantly simple at first glance. But teasing apart its components sheds light on its profound complexities. Coupled with the fact that UAV warfare has profoundly changed the conduct of warfare, it is easy to see why writers avoid the details in proportionality.

There are two things about which humanitarian law scholars always agree. The first is that it is extremely difficult to apply IHL Proportionality to any particular set of circumstances. The second is that the law of war lags far behind the technologies of war.

This Article sits at the confluence of those two truths, applying a vexing rule to a technological revolution that remains beyond the grasp of most.

The silver lining is that modern weapons of war give us the ability to be patient and precise in ways previously unimaginable. My hope is that the laws of war can catch up quickly to technology and impose a commensurate legal obligation.